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000.3 L364 Lattimore

INTERPOLATION TABLES.

BY THE

COLLEGE STAFF.

e Branner Geological Library

AND·STAN

S. F. PECKHAM

C. 4. 5
L 364

1 ft. of oil. = $\frac{1}{3}$ lb standing pressure

1000 ft. oil = 333 lbs " " "

Discharge from pipe

$$D = 26\sqrt{\frac{P d^5}{L}}$$

D = discharge in Bbls, 42 gals in:

P = Pressure in lbs per sq. in.

d = diam. of pipe in inches.

L = Length " " " inches.

L = 10 m. d = 3 in. P = 1000 lbs

d^5 = 243 × 1000 = 243.000 ÷ 10 = 24.3

$\sqrt{24.300}$ = 156 ±, 156 × 26 = 4056 Bbl.

d = 2 in. discharge 1466 Bbl. per da

d = 1½ " " 365 " " "

Coefficient 26 good for Venango

Lim for more dense oil.

J C Branner

TABLES

FOR THE

RAPID AND EXACT COMPUTATION

OF THE

NUMBER OF GALLONS

CONTAINED IN

ANY GIVEN WEIGHT OF OIL, OR OTHER LIQUID LIGHTER THAN WATER,

Without Measuring or Gauging.

ARRANGED WITH SPECIAL REFERENCE TO THE WANTS OF THE PETROLEUM TRADE.

BY S. A. LATTIMORE, A. M.,

Prof. of Chemistry in the University of Rochester, N. Y.

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ROCHESTER, N. Y.

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1872.

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PREFACE.

The accompanying Tables are designed to facilitate the computation of the number of gallons contained in any bulk of oil or other fluid lighter than water, the exact weight being known. The labor and loss involved in measuring large volumes are so great that it is always avoided when possible. Gauging—the usual substitute for measuring—is a method of finding the capacity of a vessel by measuring its dimensions with a graduated rod and by certain empirical rules computing the contents. The great care required in making accurate measurements, and the unavoidable irregularities in the shape of casks, render this method at best but an approximation to the truth. The discrepancies in the results obtained by gauging are but too familiar as a source of frequent difficulty in commercial transactions.

To such admirable perfection has the balance, in its various forms, been brought, that the weight of any bulk, however large or small, may always be determined with a high degree of accuracy, and with little labor or loss of time.

WEIGHT IS THE TRUE CRITERION OF QUANTITY, and the growing tendency to substitute the balance for measures of capacity in commercial transactions is worthy of encouragement by all, since it promotes fair dealing, and is alike to the real interest both of producer and consumer. Some liquids, such as acids and pharmaceutical preparations, are

always bought and sold by weight, and this doubtless ultimately become universal. In son a certain number of pounds are accepted as weight is not exact, consequently, while the c few gallons may be inappreciable, when it con tiplied by hundreds or thousands, the error Yet while the custom of the trade still require oils and many other commodities to be esti pounds, but in gallons, it is highly importan ties concerned should be able to determine thi the terms required, by a method which is at c rapid in its application, and uniformly exact i obtained. To furnish such a method is the o tables.

They are constructed on the following sci ples :

THE SPECIFIC GRAVITY of a liquid is its *Re* as compared with an equal volume of distille the volume, and consequently the specific with the temperature, some degree must as the standard, and since 60° F. is a degr tained at all seasons, it is chosen as the te which all Hydrometrical tests are to be made. gravity of any liquid may be determined wi precision by means of the Specific Gravity Bot cate balance. These instruments are to be fou oratory of every chemist. An indirect meth plishing the same result, which requires far time, and yet is sufficiently exact, is by th *Hydrometer*. The value of the Hydrometer the accuracy with which its scale is graduated. determined by testing it by means of the Sp *Bottle* and Balance. The specific gravity of a *same* weight as water is 1·; of a liquid half

of a liquid twice as heavy, 2°. The intervals between these degrees are divided into any desired number of equal parts —usually to the third or fourth decimal place. Such is the *Specific Gravity Hydrometer.*

For technical and commercial purposes, unfortunately, a great variety of Hydrometers are used, which it is difficult to compare with each other. In some the degrees are conventional, having no reference to the real specific gravity whatever, while in others the corresponding specific gravity may be ascertained by a simple calculation or by reference to a table. The scales most commonly employed in this country in the arts and in commerce are those devised in the last century by Baumé, a Parisian pharmaceutist, and known as Baumé's Hydrometers—one for liquids heavier than water—the other for liquids lighter than water. The latter only will be considered here. The graduation is made as follows: The instrument, with blank scale, is allowed to float in distilled water at 60° F. The point to which it sinks is marked 10°. It is now transferred to water holding in solution exactly ten per cent. of its weight of salt, and the point to which it now sinks marked 0, the bulb having been previously so loaded with mercury or lead that the point shall fall at the bottom of the scale. The interval between these two points is divided into ten equal parts, and the remainder of the scale is graduated, as far as necessary, according to this basis.

For the purpose of finding the specific gravity corresponding to any degree of the Baumé scale thus constructed, or the reverse, it is customary to use an empirical formula. Different authorities employ slightly different formulae, and hence slight discrepancies occur in the results obtained, as may be seen by comparing the tables given in different *works on* technology. Amid these discrepancies, and in the

absence of any legal authority fixing th
grees of the Baumé scale, it became 1
some one formula as the basis of these t:
ence has accordingly been given to the s
latest edition—the thirteenth—of Wood :
States Dispensatory, page 1751. As this
to 70°, the higher numbers required fo
leum products have been added. The c
in degrees of specific gravity, together
pounds avoirdupois in one gallon of 23
be found on a subsequent page, and may
of comparing different scales.

The author will be glad to receive sugg
fications of any of these tables, or the
which may render this collection more ac
to those for whom it is designed.

S. A.

University of Rochester,
June 1st, 1872.

HOW TO USE THE TABLES.

Ascertain the net weight of the oil or other fluid by the balance. The gravity is to be next accurately ascertained by means of a correct Hydrometer, the temperature of the fluid being 60° F. and the line of the scale just below the surface being taken. Turn to the page on which that gravity is given. In the first column find the number of pounds. Opposite this number, in the column for the proper gravity, will be found the corresponding number of gallons, tenths and hundredths. If the exact number of pounds does not occur, take the nearest smaller number, then the number next less than the remainder, and so on, until the sum of these several numbers is the exact number of pounds required.

EXAMPLE.—In 2384 lbs. of oil of 45° B. how many gallons?

2000 lbs.	=300.08	gallons,
300 "	= 45.01	"
80 "	= 12.00	"
4 "	= .60	"
2384 lbs.	=357.69	gallons.

An additional series of Tables is given embracing the more common gravities of petroleum products and the range of the number of gallons ordinarily contained in a single cask. Find the page for the required gravity and opposite the net weight will be found the exact number of gallons contained in the cask.

POUNDS.	15°	16°	17°	18°	19°
	GALS.	GALS.	GALS.	GALS.	GALS.
1	.12	.13	.13	.13	.13
2	.25	.25	.25	.25	.26
3	.37	.38	.38	.38	.38
4	.50	.50	.50	.51	.51
5	.62	.63	.63	.63	.64
6	.75	.76	.76	.76	.77
7	.87	.88	.88	.89	.89
8	1.00	1.00	1.01	1.02	1.02
9	1.12	1.13	1.13	1.14	1.15
10	1.24	1.25	1.26	1.27	1.28
20	2.49	2.50	2.52	2.54	2.56
30	3.73	3.76	3.78	3.81	3.83
40	4.97	5.01	5.04	5.08	5.11
50	6.22	6.26	6.30	6.34	6.39
60	7.46	7.51	7.56	7.61	7.67
70	8.70	8.76	8.82	8.88	8.94
80	9.95	10.01	10.08	10.15	10.22
90	11.19	11.27	11.34	11.42	11.50
100	12.43	12.52	12.61	12.69	12.78
200	24.87	25.04	25.21	25.38	25.55
300	37.30	37.55	37.81	38.07	38.33
400	49.73	50.07	50.42	50.76	51.11
500	62.16	62.59	63.02	63.45	63.88
1000	124.32	125.18	126.05	126.90	127.76
2000	248.65	250.36	252.09	253.80	255.53
3000	372.97	375.54	378.13	380.69	383.29
4000	497.29	500.71	504.18	507.59	511.05
5000	621.61	625.89	630.23	634.49	638.81
10000	1243.22	1251.78	1260.46	1268.99	1277.63
20000	2486.45	2503.57	2520.92	2537.97	2555.26

POUNDS.	DEGREES OF BAUMÉ'S H			
	20°	21°	22°	
	GALS.	GALS.	GALS.	
1	.13	.13	.13	
2	.26	.26	.26	
3	.39	.39	.39	
4	.52	.52	.52	
5	.64	.65	.65	
6	.77	.78	.78	
7	.90	.91	.91	
8	1.03	1.04	1.04	
9	1.16	1.17	1.17	1
10	1.29	1.39	1.30	1
20	2.57	2.58	2.61	2
30	3.86	3.88	3.91	3.
40	5.15	5.18	5.21	5.
50	6.43	6.47	6.52	6.
60	7.72	7.77	7.82	7.
70	9.00	9.06	9.12	9.1
80	10.29	10.36	10.43	10.4
90	11.58	11.65	11.73	11.8
100	12.86	12.95	13.03	13.1
200	25.72	25.84	26.07	26.2
300	38.58	38.84	39.10	39.3
400	51.45	51.79	52.13	52.4
500	64.31	64.74	65.16	65.5
1000	128.61	129.47	130.33	131.1
2000	257.22	258.94	260.66	262.3
3000	385.84	388.42	390.99	393.5
4000	514.45	517.89	521.31	524.7
5000	643.06	647.36	651.64	655.9
10000	1286.12	1294.72	1303.29	1311
20000	2572.24	2589.43	2606.58	2623

OUNDS.	25°	26°	27°	28°	29°
	GALS.	GALS.	GALS.	GALS.	GALS.
1	.13	.13	.14	.14	.14
2	.27	.27	.27	.27	.27
3	.40	.40	.40	.41	.41
4	.53	.54	.54	.54	.55
5	.66	.67	.67	.68	.68
6	.80	.80	.81	.81	.82
7	.93	.94	.94	.95	.95
8	1.06	1.07	1.08	1.08	1.09
9	1.20	1.20	1.21	1.22	1.23
10	1.33	1.34	1.35	1.35	1.36
20	2.66	2.68	2.69	2.71	2.73
30	3.99	4.01	4.04	4.06	4.09
40	5.31	5.35	5.38	5.42	5.45
50	6.64	6.69	6.73	6.77	6.82
60	7.97	8.03	8.08	8.13	8.18
70	9.30	9.36	9.42	9.48	9.53
80	10.63	10.70	10.77	10.84	10.91
90	11.96	12.04	12.12	12.19	12.27
100	13.29	13.38	13.46	13.55	13.63
200	26.57	26.75	26.92	27.10	27.27
300	39.86	40.13	40.38	40.64	40.90
400	53.15	53.50	53.85	54.19	54.53
500	66.45	66.88	67.30	67.74	68.16
1000	132.87	133.76	134.61	135.48	136.33
2000	265.73	267.52	269.22	270.96	272.65
3000	398.60	401.28	403.83	406.43	408.97
4000	531.47	535.03	538.45	541.91	545.30
5000	664.34	668.79	673.06	677.39	681.63
10000	1328.67	1337.58	1346.11	1354.78	1363.25
20000	2657.35	2675.15	2692.22	2709.56	2726.50

37	38	39
AIS	SAZS.	TAZS
[illegible]	[illegible]	[illegible]
.2	.2	[illegible]
.13	.13	[illegible]
.57	.58	[illegible]
.72	.72	[illegible]
.8	.8	[illegible]
[illegible]	[illegible]	[illegible]
.13	.13	[illegible]
.28	1.26	[illegible]
[illegible]	1.43	[illegible]
[illegible]	2.87	[illegible]
[illegible]	4.3	[illegible]
[illegible]	5.73	[illegible]
[illegible]	7.16	[illegible]
[illegible]	8.60	[illegible]
[illegible]	10.03	[illegible]
[illegible]	11.46	[illegible]
12.81	12.86	[illegible]
14.23	14.33	[illegible]
[illegible]	28.65	[illegible]
[illegible]	42.98	[illegible]
[illegible]	57.30	[illegible]
[illegible]	71.63	[illegible]
[illegible]	143.26	[illegible]
[illegible]	286.51	[illegible]
[illegible]	429.78	[illegible]
[illegible]	573.04	[illegible]
[illegible]	716.20	[illegible]
[illegible]	1432.58	[illegible]
[illegible]	2865.16	[illegible]

POUNDS.	DEGREES OF BAUMÉ'S HYDROMETER				
	30°	31°	32°	33°	
	GALS.	GALS.	GALS.	GALS.	G
1	.14	.14	.14	.14	
2	.27	.28	.28	.28	
3	.41	.41	.42	.42	
4	.55	.56	.56	.56	
5	.69	.69	.69	.70	
6	.82	.83	.83	.84	
7	.96	.97	.97	.98	
8	1.10	1.10	1.11	1.12	
9	1.24	1.24	1.25	1.26	
10	1.37	1.38	1.39	1.40	
20	2.74	2.76	2.78	2.80	
30	4.12	4.14	4.17	4.19	
40	5.49	5.52	5.56	5.59	
50	6.86	6.90	6.94	6.99	
60	8.23	8.28	8.33	8.39	
70	9.60	9.66	9.72	9.78	
80	10.97	11.04	11.11	11.18	
90	12.35	12.42	12.50	12.58	
100	13.72	13.80	13.89	13.98	
200	27.44	27.61	27.78	27.95	
300	41.15	41.42	41.67	41.93	
400	54.87	55.22	55.56	55.91	
500	68.59	69.02	69.45	69.88	
1000	137.18	138.05	138.91	139.77	1
2000	274.36	276.10	277.81	279.54	2
3000	411.54	414.14	416.71	419.30	4
4000	548.72	552.19	555.62	559.07	5
5000	685.90	690.24	694.52	698.84	7
10000	1371.81	1380.49	1389.05	1397.68	1
20000	2743.63	2760.98	2778.10	2795.36	2

POUNDS.	35°	36°	37°	38°	39°
	GALS.	GALS.	GALS.	GALS.	GALS.
1	.14	.14	.14	.14	.14
2	.28	.28	.29	.29	.29
3	.43	.43	.43	.43	.43
4	.57	.57	.57	.58	58
5	.71	.71	.72	.72	.72
6	.85	.85	.86	.86	.87
7	.99	1.00	1.00	1.01	1.01
8	1.13	1.14	1.15	1.15	1.16
9	1.27	1.28	1.29	1.30	1.30
10	1.41	1.42	1.43	1.44	1.45
20	2.83	2.85	2.87	2.88	2.90
30	4.25	4.27	4.30	4.32	4.35
40	5.66	5.69	5.73	5.76	5.80
50	7.07	7.12	7.16	7.20	7.24
60	8.49	8.54	8.60	8.64	8.69
70	9.91	9.96	10.03	10.08	10.14
80	11.33	11.39	11.46	11.52	11.59
90	12.73	12.81	12.89	12.96	13.04
100	14.15	14.23	14.33	14.40	14.49
200	28.30	28.47	28.65	28.81	28.98
300	42.45	42.70	42.98	43.21	43.46
400	56.60	56.93	57.30	57.62	57.95
500	70.74	71.17	71.63	72.02	72.44
1000	141.48	142.34	143.26	144.04	144.88
2000	282.97	284.67	286.51	288.09	289.76
3000	424.44	427.02	429.78	432.12	434.64
4000	565.92	569.36	573.04	576.16	579.52
5000	707.41	711.68	716.29	720.24	724.41
10000	1414.83	1423.36	1432.58	1440.47	1448.81
20000	2829.65	2846.73	2865.16	2880.93	2897.63

POUNDS.	DEGREES OF BAUMÉ'S HYDROMETER			
	40°	41°	42°	43°
	GALS.	GALS.	GALS.	GALS.
1	.15	.15	.15	.15
2	.29	.29	.29	.30
3	.44	.44	.44	.45
4	.58	.59	.59	.59
5	.73	.73	.74	.74
6	.88	.88	.89	.89
7	1.02	1.03	1.03	1.04
8	1.17	1.17	1.18	1.19
9	1.30	1.32	1.33	1.34
10	1.46	1.47	1.47	1.48
20	2.92	2.93	2.95	2.97
30	4.37	4.40	4.42	4.45
40	5.83	5.86	5.90	5.93
50	7.29	7.33	7.37	7.41
60	8.75	8.80	8.85	8.90
70	10.20	10.26	10.32	10.38
80	11.66	11.73	11.80	11.87
90	13.12	13.20	13.27	13.35
100	14.58	14.66	14.75	14.83
200	29.16	29.32	29.50	29.67
300	43.73	43.98	44.24	44.50
400	58.31	58.65	58.99	59.34
500	72.89	72.31	73.74	74.17
1000	145.77	146.61	147.48	148.34
2000	291.55	293.23	294.96	296.67
3000	437.31	439.84	442.44	445.02
4000	583.09	586.46	589.92	593.35
5000	728.86	733.07	737.40	741.69
10000	1457.73	1466.15	1474.80	1483.37
20000	2915.45	2932.29	2949.59	2966.74

POUNDS.	45°	46°	47°	48°	49°
	GALS.	GALS.	GALS.	GALS.	GALS.
1	.15	.15	.15	.15	.15
2	.30	.30	.30	.31	.31
3	.45	.45	.46	.46	.46
4	.60	.60	.61	.61	.61
5	.75	.76	.76	.76	.77
6	.90	.91	.91	.92	.92
7	1.05	1.06	1.06	1.07	1.07
8	1.20	1.21	1.21	1.22	1.23
9	1.35	1.36	1.37	1.37	1.38
10	1.50	1.51	1.52	1.53	1.53
20	3.00	3.02	3.04	3.05	3.07
30	4.50	4.53	4.55	4.58	4.60
40	6.00	6.04	6.07	6.11	6.14
50	7.50	7.55	7.59	7.63	7.67
60	9.00	9.05	9.11	9.16	9.21
70	10.50	10.56	10.62	10.68	10.74
80	12.00	12.07	12.14	12.21	12.28
90	13.50	13.59	13.66	13.74	13.81
100	15.00	15.09	15.18	15.26	15.35
200	30.00	30.18	30.36	30.52	30.70
300	45.01	45.27	45.53	45.79	46.04
400	60.02	60.36	60.71	61.05	61.39
500	75.02	75.45	75.88	76.31	76.74
1000	150.04	150.91	151.77	152.62	163.48
2000	300.08	301.82	303.56	305.24	306.95
3000	450.13	452.73	455.30	457.85	460.43
4000	600.17	603.64	607.07	610.47	613.91
5000	750.21	754.55	758.84	763.09	767.38
10000	1500.42	1509.09	1517.68	1526.18	1534.75
20000	3000.84	3018.18	3035.56	3052.36	3069.51

POUNDS.	DEGREES OF BAUMÉ'S HYDROMETER.				
	20°	21°	22°	23°	24
	GALS.	GALS.	GALS.	GALS.	GAI
1	.13	.13	.13	.13	
2	.26	.26	.26	.26	
3	.39	.39	.39	.39	
4	.52	.52	.52	.53	
5	.64	.65	.65	.66	
6	.77	.78	.78	.79	
7	.90	.91	.91	.92	
8	1.03	1.04	1.04	1.05	1
9	1.16	1.17	1.17	1.18	1
10	1.29	1.39	1.30	1.31	1
20	2.57	2.58	2.61	2.62	2
30	3.86	3.88	3.91	3.94	3
40	5.15	5.18	5.21	5.25	5
50	6.43	6.47	6.52	6.56	6
60	7.72	7.77	7.82	7.87	7
70	9.00	9.06	9.12	9.18	9
80	10.29	10.36	10.43	10.49	10
90	11.58	11.65	11.73	11.81	11
100	12.86	12.95	13.03	13.12	13
200	25.72	25.84	26.07	26.24	26
300	38.58	38.84	39.10	39.36	39
400	51.45	51.79	52.13	52.47	52
500	64.31	64.74	65.16	65.59	66
1000	128.61	129.47	130.33	131.18	132
2000	257.22	258.94	260.66	262.37	264
3000	385.84	388.42	390.99	393.55	396
4000	514.45	517.89	521.31	524.73	528
5000	643.06	647.36	651.64	655.92	660
10000	1286.12	1294.72	1303.29	1311.84	1320
20000	2572.24	2589.43	2606.58	2623.67	264

POUNDS.	15°	16°	17°	18°	19°
	GALS.	GALS.	GALS.	GALS.	GALS.
1	.12	.13	.13	.13	.13
2	.25	.25	.25	.25	.26
3	.37	.38	.38	.38	.38
4	.50	.50	.50	.51	.51
5	.62	.63	.63	.63	.64
6	.75	.76	.76	.76	.77
7	.87	.88	.88	.89	.89
8	1.00	1.00	1.01	1.02	1.02
9	1.12	1.13	1.13	1.14	1.15
10	1.24	1.25	1.26	1.27	1.28
20	2.49	2.50	2.52	2.54	2.56
30	3.73	3.76	3.78	3.81	3.83
40	4.97	5.01	5.04	5.08	5.11
50	6.22	6.26	6.30	6.34	6.39
60	7.46	7.51	7.56	7.61	7.67
70	8.70	8.76	8.82	8.88	8.94
80	9.95	10.01	10.08	10.15	10.22
90	11.19	11.27	11.34	11.42	11.50
100	12.43	12.52	12.61	12.69	12.78
200	24.87	25.04	25.21	25.38	25.55
300	37.30	37.55	37.81	38.07	38.33
400	49.73	50.07	50.42	50.76	51.11
500	62.16	62.59	63.02	63.45	63.88
1000	124.32	125.18	126.05	126.90	127.76
2000	248.65	250.36	252.09	253.80	255.53
3000	372.97	375.54	378.13	380.69	383.29
4000	497.29	500.71	504.18	507.59	511.05
5000	621.61	625.89	630.23	634.49	638.81
10000	1243.22	1251.78	1260.46	1268.99	1277.63
20000	2486.45	2503.57	2520.92	2537.97	2555.26

POUNDS.	DEGREES OF BAUME'S HYDROMETER.				
	30°	31°	32°	33°	
	GALS.	GALS.	GALS.	GALS.	G
1	.14	.14	.14	.14	
2	.27	.28	.28	.28	
3	.41	.41	.42	.42	
4	.55	.56	.56	.56	
5	.69	.69	.69	.70	
6	.82	.83	.83	.84	
7	.96	.97	.97	.98	
8	1.10	1.10	1.11	1.12	
9	1.24	1.24	1.25	1.26	
10	1.37	1.38	1.39	1.40	
20	2.74	2.76	2.78	2.80	
30	4.12	4.14	4.17	4.19	
40	5.49	5.52	5.56	5.59	
50	6.86	6.90	6.94	6.99	
60	8.23	8.28	8.33	8.39	
70	9.60	9.66	9.72	9.78	
80	10.97	11.04	11.11	11.18	
90	12.35	12.42	12.50	12.58	
100	13.72	13.80	13.89	13.98	
200	27.44	27.61	27.78	27.95	
300	41.15	41.42	41.67	41.93	
400	54.87	55.22	55.56	55.91	
500	68.59	69.02	69.45	69.88	
1000	137.18	138.05	138.91	139.77	1
2000	274.36	276.10	277.81	279.54	2
3000	411.54	414.14	416.71	419.30	4
4000	548.72	552.19	555.62	559.07	5
5000	685.90	690.24	694.52	698.84	7
10000	1371.81	1380.49	1389.05	1397.68	14
20000	2743.63	2760.98	2778.10	2795.36	28

POUNDS.	35°	36°	37°	38°	39°
	GALS.	GALS.	GALS.	GALS.	GALS.
1	.14	.14	.14	.14	.14
2	.28	.28	.29	.29	.29
3	.43	.43	.43	.43	.43
4	.57	.57	.57	.58	58
5	.71	.71	.72	.72	.72
6	.85	.85	.86	.86	.87
7	.99	1.00	1.00	1.01	1.01
8	1.13	1.14	1.15	1.15	1.16
9	1.27	1.28	1.29	1.30	1.30
10	1.41	1.42	1.43	1.44	1.45
20	2.83	2.85	2.87	2.88	2.90
30	4.25	4.27	4.30	4.32	4.35
40	5.66	5.69	5.73	5.76	5.80
50	7.07	7.12	7.16	7.20	7.24
60	8.49	8.54	8.60	8.64	8.69
70	9.91	9.96	10.03	10.08	10.14
80	11.33	11.39	11.46	11.52	11.59
90	12.73	12.81	12.89	12.96	13.04
100	14.15	14.23	14.33	14.40	14.49
200	28.30	28.47	28.65	28.81	28.98
300	42.45	42.70	42.98	43.21	43.46
400	56.60	56.93	57.30	57.62	57.95
500	70.74	71.17	71.63	72.02	72.44
1000	141.48	142.34	143.26	144.04	144.88
2000	282.97	284.67	286.51	288.09	289.76
3000	424.44	427.02	429.78	432.12	434.64
4000	565.92	569.36	573.04	576.16	579.52
5000	707.41	711.68	716.29	720.24	724.41
10000	1414.83	1423.36	1432.58	1440.47	1448.81
20000	2829.65	2846.73	2865.16	2880.93	2897.63

NDS.	DEGREES OF BAUMÉ'S HYDROMI			
	40°	41°	42°	43°
	GALS.	GALS.	GALS.	GALS.
1	.15	.15	.15	.1
2	.29	.29	.29	.3
3	.44	.44	.44	.4
4	.58	.59	.59	.5
5	.73	.73	.74	.7
6	.88	.88	.89	.8
7	1.02	1.03	1.03	1.0
8	1.17	1.17	1.18	1.1
9	1.30	1.32	1.33	1.3
10	1.46	1.47	1.47	1.4
20	2.92	2.93	2.95	2.9
30	4.37	4.40	4.42	4.4
40	5.83	5.86	5.90	5.9
50	7.29	7.33	7.37	7.4
60	8.75	8.80	8.85	8.
70	10.20	10.26	10.32	10.
80	11.66	11.73	11.80	11
90	13.12	13.20	13.27	13
100	14.58	14.66	14.75	1.
200	29.16	29.32	29.50	2
300	43.73	43.98	44.24	4
400	58.31	58.65	58.99	
500	72.89	72.31	73.74	
1000	145.77	146.61	147.48	
2000	291.55	293.23	294.96	
3000	437.31	439.84	442.44	
4000	583.09	586.46	589.92	
5000	728.86	733.07	737.40	
10000	1457.73	1466.15	1474.80	
20000	2915.45	2932.29	2949.5	

POUNDS.	45°	46°	47°	48°	49°
	GALS.	GALS.	GALS.	GALS.	GALS.
1	.15	.15	.15	.15	.15
2	.30	.30	.30	.31	.31
3	.45	.45	.46	.46	.46
4	.60	.60	.61	.61	.61
5	.75	.76	.76	.76	.77
6	.90	.91	.91	.92	.92
7	1.05	1.06	1.06	1.07	1.07
8	1.20	1.21	1.21	1.22	1.23
9	1.35	1.36	1.37	1.37	1.38
10	1.50	1.51	1.52	1.53	1.53
20	3.00	3.02	3.04	3.05	3.07
30	4.50	4.53	4.55	4.58	4.60
40	6.00	6.04	6.07	6.11	6.14
50	7.50	7.55	7.59	7.63	7.67
60	9.00	9.05	9.11	9.16	9.21
70	10.50	10.56	10.62	10.68	10.74
80	12.00	12.07	12.14	12.21	12.28
90	13.50	13.59	13.66	13.74	13.81
100	15.00	15.09	15.18	15.26	15.35
200	30.00	30.18	30.36	30.52	30.70
300	45.01	45.27	45.53	45.79	46.04
400	60.02	60.36	60.71	61.05	61.39
500	75.02	75.45	75.88	76.31	76.74
1000	150.04	150.91	151.77	152.62	163.48
2000	300.08	301.82	303.56	305.24	306.95
3000	450.13	452.73	455.30	457.85	460.43
4000	600.17	603.64	607.07	610.47	613.91
5000	750.21	754.55	758.84	763.09	767.38
10000	1500.42	1509.09	1517.68	1526.18	1534.75
20000	3000.84	3018.18	3035.36	3052.36	3069.51

POUNDS.	DEGREES OF BAUMÉ'S HYDROMETER.				
	50°	51°	52°	53°	
	GALS.	GALS.	GALS.	GALS.	G.
1	.15	.16	.16	.16	
2	.31	.31	.31	.31	
3	.46	.47	.47	.47	
4	.62	.62	.62	.63	
5	.77	.78	.78	.79	
6	.93	.93	.94	.94	
7	1.08	1.09	1.09	1.10	
8	1.24	1.24	1.25	1.26	
9	1.39	1.40	1.40	1.41	
10	1.54	1.55	1.56	1.57	
20	3.09	3.10	3.12	3.14	
30	4.63	4.66	4.68	4.71	
40	6.17	6.21	6.24	6.28	
50	7.72	7.76	7.80	7.85	
60	9.26	9.31	9.36	9.41	
70	10.80	10.86	10.92	10.98	
80	12.35	12.42	12.48	12.55	
90	13.89	13.97	14.04	14.12	
100	15.43	15.52	15.61	15.69	
200	30.87	31.04	31.21	31.38	
300	46.30	46.56	46.82	47.07	
400	61.74	62.08	62.42	62.76	
500	77.17	77.60	78.03	78.45	
1000	154.34	155.20	156.05	156.91	1
2000	308.69	310.40	312.10	313.81	3
3000	463.03	465.60	468.15	470.72	4
4000	617.38	620.80	624.20	627.63	6
5000	771.72	776.01	780.25	784.54	7
10000	1543.45	1552.02	1560.50	1569.07	15
20000	3086.90	3104.05	3121.00	3138.14	3

POUNDS.	55°	56°	57°	58°	59°
	GALS.	GALS.	GALS.	GALS.	GALS.
1	.16	.16	.16	.16	.16
2	.32	.32	.32	.32	32
3	.48	.48	.48	.48	.49
4	.64	.64	.64	.65	.65
5	.79	.80	.80	.81	.81
6	.95	.96	.96	.97	.97
7	1.11	1.12	1.12	1.13	1.13
8	1.27	1.28	1.28	1.29	1.30
9	1.43	1.44	1.44	1.45	1.46
10	1.59	1.59	1.60	1.61	1.62
20	3.17	3.19	3.21	3.22	3.24
30	4.76	4.78	4.81	4.84	4.86
40	6.35	6.38	6.41	6.45	6.48
50	7.93	7.97	8.02	8.06	8.10
60	9.52	9.57	9.62	9.67	9.72
70	11.10	11.16	11.22	11.28	11.34
80	12.69	12.76	12.83	12.90	12.96
90	14.28	14.35	14.43	14.51	14.58
100	15.86	15.95	16.03	16.12	16.21
200	31.73	31.90	32.07	32.24	32.41
300	47.59	47.85	48.10	48.36	48.61
400	63.45	63.80	64.14	64.48	64.82
500	79.31	79.75	80.17	80.60	81.03
1000	158.63	159.49	160.34	161.21	162.05
2000	317.25	318.98	320.69	322.41	324.11
3000	475.88	478.47	481.03	483.60	486.16
4000	634.51	637.96	641.37	644.82	648.21
5000	793.13	797.45	801.72	806.02	810.27
10000	1586.27	1594.90	1603.44	1612.05	1620.54
20000	3172.53	3189.79	3206.87	3224.09	3241.07

POUNDS.	DEGREES OF BAUMÉ'S HYDROMETER.				
	60°	61°	62°	63°	64
	GALS.	GALS.	GALS.	GALS.	GAL
1	.16	.16	.17	.17	.
2	.32	.33	.33	.33	.
3	.49	.49	.49	.50	.
4	.65	.66	.66	.66	.
5	.82	.82	.82	.83	.
6	.98	.98	.99	1.00	1.
7	1.14	1.15	1.15	1.16	1.
8	1.30	1.31	1.31	1.32	1.
9	1.47	1.47	1.48	1.49	1
10	1.63	1.64	1.65	1.65	1
20	3.24	3.28	3.29	3.31	3
30	4.89	4.91	4.94	4.96	4
40	6.52	6.55	6.59	6.62	6
50	8.15	8.19	8.23	8.27	8.
60	9.77	9.83	9.88	9.93	9.
70	11.40	11.46	11.53	11.58	11.
80	13.03	13.10	13.16	13.24	13.
90	14.66	14.74	14.82	14.89	14.
100	16.29	16.38	16.47	16.55	16.
200	32.38	32.76	32.93	33.10	33.
300	48.87	49.13	49.40	49.65	49.
400	65.16	65.51	65.86	66.20	66.
500	81.46	81.89	82.33	82.75	83.
1000	162.91	163.78	164.66	165.49	166.
2000	323.82	327.56	329.31	330.99	332
3000	488.73	491.34	493.97	496.48	499
4000	651.64	655.11	658.62	661.98	665
5000	814.56	818.89	823.28	827.47	831
10000	1629.12	1637.79	1646.55	1654.94	1663
20000	3238.24	3275.57	3293.10	3309.88	332

'OUNDS.	65°	70°	75°	80°	85°
	GALS.	GALS.	GALS.	GALS.	GALS.
1	.17	.17	.18	.18	.18
2	.33	.34	.35	.36	.37
3	.50	.51	.53	.54	.55
4	.67	.69	.70	.72	.74
5	.84	.86	.88	.99	.92
6	1.00	1.03	1.06	1.08	1.11
7	1.17	1.20	1.23	1.26	1.29
8	1.34	1.37	1.41	1.44	1.48
9	1.50	1.54	1.58	1.62	1.66
10	1.67	1.72	1.76	1.80	1.84
20	3.34	3.43	3.52	3.60	3.69
30	5.02	5.14	5.28	5.40	5.53
40	6.69	6.86	7.03	7.20	7.37
50	8.36	8.57	8.79	9.00	9.22
60	10.03	10.29	10.55	10.80	11.06
70	11.69	12.00	12.31	12.60	12.90
80	13.38	13.72	14.07	14.41	14.75
90	15.05	15.43	15.83	16.21	16.59
100	16.72	17.15	17.59	18.01	18.44
200	33.44	34.30	35.17	36.01	36.87
300	50.16	51.44	52.76	54.02	55.31
400	66.88	68.59	70.34	72.03	73.74
500	83.60	85.74	87.93	90.04	92.18
1000	167.20	171.48	175.86	180.07	184.36
2000	334.40	342.95	351.72	360.14	368.71
3000	510.60	514.43	527.58	540.21	553.06
4000	668.81	685.91	703.44	720.28	737.42
5000	836.01	857.38	879.30	900.35	921.77
10000	1672.02	1714.77	1758.59	1800.70	1843.55
20000	3344.03	3429.53	3517.18	3601.40	3687.11

POUNDS.	DEGREES OF BAUMÉ'S HYDROMETER.				
	60°	61°	62°	63°	
	GALS.	GALS.	GALS.	GALS.	G
1	.16	.16	.17	.17	
2	.32	.33	.33	.33	
3	.49	.49	.49	.50	
4	.65	.66	.66	.66	
5	.82	.82	.82	.83	
6	.98	.98	.99	1.00	
7	1.14	1.15	1.15	1.16	
8	1.30	1.31	1.31	1.32	
9	1.47	1.47	1.48	1.49	
10	1.63	1.64	1.65	1.65	
20	3.24	3.28	3.29	3.31	
30	4.89	4.91	4.94	4.96	
40	6.52	6.55	6.59	6.62	
50	8.15	8.19	8.23	8.27	
60	9.77	9.83	9.88	9.93	
70	11.40	11.46	11.53	11.58	
80	13.03	13.10	13.16	13.24	
90	14.66	14.74	14.82	14.89	
100	16.29	16.38	16.47	16.55	
200	32.38	32.76	32.93	33.10	
300	48.87	49.13	49.40	49.65	
400	65.16	65.51	65.86	66.20	
500	81.46	81.89	82.33	82.75	
1000	162.91	163.78	164.66	165.49	1
2000	323.82	327.56	329.31	330.99	3
3000	488.73	491.34	493.97	496.48	4
4000	651.64	655.11	658.62	661.98	6
5000	814.56	818.89	823.28	827.47	8
10000	1629.12	1637.79	1646.55	1654.94	16
20000	3238.24	3275.57	3293.10	3309.88	3

POUNDS.	65°	70°	75°	80°	85°
	GALS.	GALS.	GALS.	GALS.	GALS.
1	.17	.17	.18	.18	.18
2	.33	.34	.35	.36	.37
3	.50	.51	.53	.54	.55
4	.67	.69	.70	.72	.74
5	.84	.86	.88	.99	.92
6	1.00	1.03	1.06	1.08	1.11
7	1.17	1.20	1.23	1.26	1.29
8	1.34	1.37	1.41	1.44	1.48
9	1.50	1.54	1.58	1.62	1.66
10	1.67	1.72	1.76	1.80	1.84
20	3.34	3.43	3.52	3.60	3.69
30	5.02	5.14	5.28	5.40	5.53
40	6.69	6.86	7.03	7.20	7.37
50	8.36	8.57	8.79	9.00	9.22
60	10.03	10.29	10.55	10.80	11.06
70	11.69	12.00	12.31	12.60	12.90
80	13.38	13.72	14.07	14.41	14.75
90	15.05	15.43	15.83	16.21	16.59
100	16.72	17.15	17.59	18.01	18.44
200	33.44	34.30	35.17	36.01	36.87
300	50.16	51.44	52.76	54.02	55.31
400	66.88	68.59	70.34	72.03	73.74
500	83.60	85.74	87.93	90.04	92.18
1000	167.20	171.48	175.86	180.07	184.36
2000	334.40	342.95	351.72	360.14	368.71
3000	510.60	514.43	527.58	540.21	553.06
4000	668.81	685.91	703.44	720.28	737.42
5000	836.01	857.38	879.30	900.35	921.77
10000	1672.02	1714.77	1758.59	1800.70	1843.55
20000	3344.03	3429.53	3517.18	3601.40	3687.11

15° GRAVITY.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
288	35.8	318	39.5	348	43.3	378	47.	408	50.
289	35.9	319	39.7	349	43.4	379	47.1	409	50.
290	36.1	320	39.8	350	43.5	380	47.3	410	51.
291	36.2	321	39.9	351	43.6	381	47.4	411	51.
292	36.3	322	40.	352	43.8	382	47.5	412	51.
293	36.4	323	40.2	353	43.9	383	47.6	413	51.
294	36.6	324	40.3	354	44.	384	47.8	414	51.
295	36.7	325	40.4	355	44.1	385	47.9	415	51.
296	36.8	326	40.5	356	44.3	586	48.	416	51.
297	36.9	327	40.7	357	44.4	387	48.1	417	51.
298	37.1	328	40.8	358	44.5	388	48.3	418	52.
299	37.2	329	40.9	359	44.6	389	48.4	419	52.
300	37.3	330	41.	360	44.8	390	48.5	420	52.
301	37.4	331	41.2	361	44.9	391	48.6	421	52
302	37.6	332	41.3	362	45.	392	48.7	422	52
303	37.7	333	41.4	363	45.1	393	48.9	423	52
304	37.8	334	41.5	364	45.3	364	49.	424	52
305	37.9	335	41.7	365	45.4	395	49.1	425	52
306	38.1	336	41.8	366	45.5	396	49.2	426	53.
307	38.2	337	41.9	367	45.6	397	49.4	427	53.1
308	38.3	338	42.	368	45.8	398	49.5	428	53.2
309	38.4	339	42.2	369	45.9	399	49.6	429	53.3
310	38.5	340	42.3	370	46.	400	49.7	430	53.5
311	38.7	341	42.4	371	46.1	401	49.9	431	53.6
312	38.8	342	42.5	372	46.3	402	50.	432	53.7
313	38.9	343	42.6	373	46.4	403	50.1	433	53.8
314	39.	344	42.8	374	46.5	404	50.2	434	53.9
315	39.2	345	42.9	375	46.6	405	50.4	435	54.
316	39.3	346	43.	376	46.8	406	50.5	436	54.2
317	39.4	347	43.1	377	46.9	407	50.6	437	54.3

BLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

S.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
0	36.	310	39.9	340	43.7	370	47.6	400	51.5
1	36.1	311	40.	341	43.9	371	47.7	401	51.6
2	36.3	312	40.1	342	44.	372	47.8	402	51.7
3	36.4	313	40.3	343	44.1	373	48.	403	51.8
4	36.5	314	40.4	344	44.3	374	48.1	404	52.
5	36.7	315	40.5	345	44.4	375	48.2	405	52.1
6	36.8	316	40.6	346	44.5	376	48.4	406	52.2
7	36.9	317	40.8	347	44.6	377	48.5	407	52.4
8	37.	318	40.9	348	44.8	378	48.6	408	52.5
9	37.2	319	41.	349	44.9	379	48.7	409	52.6
0	37.3	320	41.2	350	45.	380	48.9	410	52.7
1	37.4	321	41.3	351	45.1	381	49.	411	52.9
2	37.6	322	41.4	352	45.3	382	49.1	412	53.
3	37.7	323	41.5	353	45.4	383	49.3	413	53.1
4	37.8	324	41.7	354	45.5	384	49.4	414	53.3
5	37.9	325	41.8	355	45.7	385	49.5	415	53.4
6	38.1	326	41.9	356	45.8	586	49.6	416	53.5
7	38.2	327	42.1	357	45.9	387	49.8	417	53.6
8	38.3	328	42.2	358	46.	388	49.9	418	53.8
9	38.5	329	42.3	359	46.2	389	50.	419	53 9
0	38.6	330	42.4	360	46.3	390	50.2	420	54.
1	38.7	331	42.6	361	46.4	391	50.3	421	54.2
2	38.8	332	42.7	362	46.6	392	50.4	422	54.3
3	39.	333	42.8	363	46.7	393	50.6	423	54.4
4	39.1	334	43.	364	46.8	394	50.7	424	54.5
5	39.2	335	43.1	365	46.9	395	50.8	425	54.7
6	39.4	336	43.2	366	47.1	396	50.9	426	54.8
7	39.5	337	43.3	367	47.2	397	51.1	427	54.9
8	39.6	338	43.5	368	47.4	398	51.2	428	55.1
9	39.7	339	43.6	369	47.5	399	51.3	429	55.2

21° GRAVITY.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF (

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	G
278	36.	308	39.9	338	43.8	368	47.7	398	5
279	36.2	309	40.	339	43.9	369	47.8	399	5
280	36.3	310	40.1	340	44.	370	47.9	400	5
281	36.4	311	40.3	341	44.2	371	48.	401	5
282	36.5	312	40.4	342	44.3	372	48.2	402	5
283	36.6	313	40.5	343	44.4	373	48.3	403	5
284	36.8	314	40.7	344	44.5	374	48.4	404	5
285	36.9	315	40.8	345	44.7	375	48.6	405	5
286	37.	316	40.9	346	44.8	376	48.7	406	5
287	37.2	317	41.	347	44.9	377	48.8	407	5
288	37.3	318	41.2	348	45.1	378	48.9	408	5
289	37.4	319	41.3	349	45.2	379	49.1	409	5
290	37.5	320	41.4	350	45.3	380	49.2	410	5
291	37.7	321	41.6	351	45.4	381	49.3	411	5
292	37.8	322	41.7	352	45.6	382	49.5	412	5
293	37.9	323	41.8	353	45.7	383	49.6	413	5
294	38.1	324	42.	354	45.8	384	49.7	414	5
295	38.2	325	42.1	355	46.	385	49.9	415	5
296	38.3	326	42.2	356	46.1	586	50.	416	5
297	38.5	327	42.3	357	46.2	387	50.1	417	5
298	38.6	328	42.5	358	46.4	388	50.2	418	5
299	38.7	329	42.6	359	46.5	389	50.4	419	5
300	38.8	330	42.7	360	46.6	390	50.5	420	5
301	39.	331	42.9	361	46.7	391	50.6	421	5
302	39.1	332	43.	362	46.9	392	50.8	422	5
303	39.2	333	43.1	363	47	393	50.9	423	5
304	39.4	334	43.2	364	47.1	394	51.	424	5
305	39.5	335	43.4	365	47.3	395	51.1	425	5
306	39.6	336	43.5	366	47.4	396	51.3	426	5
307	39.8	337	43.6	367	47.5	397	51.4	427	5

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
275	35.8	305	39.8	335	43.7	365	47.6	395	51.5
276	36.	306	39.9	336	43.8	366	47.7	396	51.6
277	36.1	307	40.	337	43.9	367	47.8	397	51.7
278	36.2	308	40.1	338	44.1	368	48.	398	51.9
279	36.4	309	40.3	339	44.2	369	48.1	399	52.
280	36.5	310	40.4	340	44.3	370	48.2	400	52.1
281	36.6	311	40.5	341	44.4	371	48.4	401	52.3
282	36.8	312	40.7	342	44.6	372	48.5	402	52.4
283	36.9	313	40.8	343	44.7	373	48.6	403	52.5
284	37.	314	40.9	344	44.8	374	48.7	404	52.7
285	37.2	315	41.1	345	45.	375	48.9	405	52.8
286	37.3	316	41.2	346	45.1	376	49.	406	52.9
287	37.4	317	41.3	347	45.2	377	49.1	407	53.
288	37.5	318	41.4	348	45.4	378	49.3	408	53.2
289	37.7	319	41.6	349	45.5	379	49.4	409	53.3
290	37.8	320	41.7	350	45.6	380	49.5	410	53.4
291	37.9	321	41.8	351	45.8	381	49.7	411	53.6
292	38.1	322	42.	352	45.9	382	49.8	412	53.7
293	38.2	323	42.1	353	46.	383	49.9	413	53.8
294	38.3	324	42.2	354	46.1	384	50.1	414	54.
295	38.5	325	42.4	355	46.3	385	50.2	415	54.1
296	38.6	326	42.5	356	46.4	386	50.3	416	54.2
297	38.7	327	42.6	357	46.5	387	50.4	417	54.3
298	38.8	328	42.8	358	46.7	388	50.6	418	54.5
299	39.	329	42.9	359	46.8	389	50.7	419	54.6
300	39.1	330	43.	360	46.9	390	50.8	420	54.7
301	39.2	331	43.1	361	47.1	391	51.	421	54.9
302	39.4	332	43.3	362	47.2	392	51.1	422	55.
303	39.5	333	43.4	363	47.3	393	51.2	423	55.1
304	39.6	334	43.5	364	47.4	394	51.4	424	55.3

23° GRAVITY.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
274	36.	304	39.9	334	43.8	364	47.8	364	51.7
275	36.1	305	40.	335	44.	365	47.9	395	51.8
276	36.2	306	40.2	336	44.1	366	48.	396	52.
277	36.3	307	40.3	337	44.2	367	48.2	397	52.1
278	36.5	308	40.4	338	44.4	368	48.3	398	52.2
279	36.6	309	40.5	339	44.5	369	48.4	399	52.4
280	36.7	310	40.7	340	44.6	370	48.5	400	52.5
281	36.9	311	40.8	341	44.7	371	48.7	401	52.6
282	37.	312	40.9	342	44.9	372	48.8	402	52.7
283	37.1	313	41.1	343	45.	373	48.9	403	52.9
284	37.3	314	41.2	344	45.1	374	49.1	404	53.
285	37.4	315	41.3	345	45.3	375	49.2	405	53.1
286	37.5	316	41.5	346	45.4	376	49.3	406	53.3
287	37.7	317	41.6	347	45.5	377	49.5	407	53.4
288	37.8	318	41.7	348	45.7	378	49.6	408	53.5
289	37.9	319	41.9	349	45.8	379	49.7	409	53.7
290	38.1	320	42.	350	45.9	380	49.9	410	53.8
291	38.2	321	42.1	351	46.1	381	50.	411	53.9
292	38.3	322	42.2	352	46.2	382	50.1	412	54.1
293	38.4	323	42.4	353	46.3	383	50.2	413	54.2
294	38.6	324	42.5	354	46.5	384	50.4	414	54.3
295	38.7	325	42.6	355	46.6	385	50.5	415	54.4
296	38.8	326	42.8	356	46.7	586	50.6	416	54.6
297	39.	327	42.9	357	46.8	387	50.8	417	54.7
298	39.1	328	43.	358	47.	388	50.9	418	54.8
299	39.2	329	43.2	359	47.1	389	51.	419	55.
300	39.4	330	43.3	360	47.2	390	51.2	420	55.1
301	39.5	331	43.4	361	47.4	391	51.3	421	55.2
302	39.6	332	43.6	362	47.5	392	51.4	422	55.4
303	39.8	333	43.7	363	47.6	393	51.6	423	55.5

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
272	35.9	302	39.9	332	43.8	362	47.8	392	51.8
273	36.1	303	40.	333	44.	363	47.9	393	51.9
274	36.2	304	40.2	334	44.1	364	48.1	364	52.
275	36.3	305	40.3	335	44.2	365	48.2	395	52.2
276	36.4	306	40.4	336	44.4	366	48.3	396	52.3
277	36.6	307	40.5	337	44.5	367	48.5	397	52.4
278	36.7	308	40.7	338	44.6	368	48.6	398	52.6
278	36.9	309	40.8	339	44.8	369	48.7	399	52.7
280	37.	310	40.9	340	44.9	370	48.9	400	52.8
281	37.1	311	41.1	341	45.	371	49.	401	53.
282	37.2	312	41.2	342	45.2	372	49.1	402	53.1
283	37.4	313	41.3	343	45.3	373	49.3	403	53.2
284	37.5	314	41.5	344	45.4	374	49.4	404	53.4
285	37.6	315	41.6	345	45.6	375	49.5	405	53.5
286	37.8	316	41.7	346	45.7	376	49.7	406	53.6
287	37.9	317	41.9	347	45.8	377	49.8	407	53.7
288	38.	318	42.	348	46.	378	49.9	408	53.9
289	38.2	319	42.1	349	46.1	379	50.1	409	54.
290	38.3	320	42.3	350	46.2	380	50.2	410	54.2
291	38.4	321	42.4	351	46.4	381	50.3	411	54.4
292	38.6	322	42.5	352	46.5	382	50.4	412	54.5
293	38.7	323	42.7	353	46.6	383	50.6	413	54.6
294	38.8	324	42.8	354	46.8	384	50.7	414	54.8
295	39.	325	42.9	355	46.9	385	50.8	415	54.9
296	39.1	326	43.1	356	47.	586	51.	416	55.
297	39.2	327	43.2	357	47.1	387	51.1	417	55.2
298	39.4	328	43.3	358	47.3	388	51.2	418	55.3
299	39.5	329	43.5	359	47.4	389	51.4	419	55.4
300	39.6	330	43.6	360	47.5	390	51.5	420	55.5
301	39.8	331	43.7	361	47.7	391	51.6	421	55.6

25° GRAVITY.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
271	36.	301	40.	331	44.	361	48.	391	52.
272	36.1	302	40.1	332	44.1	362	48.1	392	52.1
273	36.3	303	40.3	333	44.3	363	48.2	393	52.2
274	36.4	304	40.4	334	44.4	364	48.4	394	52.4
275	36.5	305	40.5	335	44.5	365	48.5	395	52.5
276	36.7	306	40.7	336	44.7	366	48.6	396	52.6
277	36.8	307	40.8	337	44.8	367	48.8	397	52.8
278	36.9	308	40.9	338	44.9	368	48.9	398	52.9
279	37.1	309	41.1	339	45.1	369	49.	399	53.
280	37.2	310	41.2	340	45.2	370	49.2	400	53.2
281	37.3	311	41.3	341	45.3	371	49.3	401	53.3
282	37.5	312	41.5	342	45.4	372	49.4	402	53.4
283	37.6	313	41.6	343	45.6	373	49.6	403	53.6
284	37.7	314	41.7	344	45.7	374	49.7	404	53.7
285	37.9	315	41.9	345	45.8	375	49.8	405	53.8
286	38.	316	42.	346	46.	376	50.	406	54.
287	38.1	317	42.1	347	46.1	377	50.1	407	54.1
288	38.3	318	42.3	348	46.2	378	50.2	408	54.2
289	38.4	319	42.4	349	46.4	379	50.4	409	54.4
290	38.5	320	42.5	350	46.5	380	50.5	410	54.5
291	38.7	321	42.7	351	46.6	381	50.6	411	54.6
292	38.8	322	42.8	352	46.8	382	50.8	412	54.8
293	38.9	323	42.9	353	46.9	383	50.9	413	54.9
294	39.1	324	43.1	354	47.	384	51.	414	55.
295	39.2	325	43.2	355	47.2	385	51.2	415	55.1
296	39.3	326	43.3	356	47.3	386	51.3	416	55.3
297	39.5	327	43.5	357	47.4	387	51.4	417	55.4
298	39.6	328	43.6	358	47.6	388	51.6	418	55.5
299	39.7	329	43.7	359	47.7	389	51.7	419	55.7
300	39.9	330	43.9	360	47.8	390	51.8	420	55.8

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
269	36.	299	40.	329	44.	359	48.	389	52.
270	36.1	300	40.1	330	44.1	360	48.2	390	52.2
271	36.2	301	40.3	331	44.3	361	48.3	391	52.3
272	36.4	302	40.4	332	44.4	362	48.4	392	52.4
273	36.5	303	40.5	333	44.5	363	48.6	393	52.6
274	36.7	304	40.7	334	44.7	364	48.7	394	52.7
275	36.8	305	40.8	335	44.8	365	48.8	395	52.8
276	36.9	306	40.9	336	44.9	366	49.	396	53.
277	37.1	307	41.1	337	45.1	367	49.1	397	53.1
278	37.2	308	41.2	338	45.2	368	49.2	398	53.2
279	37.3	309	41.3	339	45.3	369	49.4	399	53.4
280	37.5	310	41.5	340	45.5	370	49.5	400	53.5
281	37.6	311	41.6	341	45.6	371	49.6	401	53.6
282	37.7	312	41.7	342	45.8	372	49.8	402	53.8
283	37.9	313	41.9	343	45.9	373	49.9	403	53.9
284	38.	314	42.	344	46.	374	50.	404	54.
285	38.1	315	42.1	345	46.2	375	50.2	405	54.2
286	38.3	316	42.3	346	46.3	376	50.3	406	54.3
287	38.4	317	42.4	347	46.4	377	50.4	407	54.4
288	38.5	318	42.5	348	46.6	378	50.6	408	54.6
289	38.7	319	42.7	349	46.7	379	50.7	409	54.7
290	38.8	320	42.8	350	46.8	380	50.8	410	54.8
291	38.9	321	42.9	351	47.	381	51.	411	55.
292	39.1	322	43.1	352	47.1	382	51.1	412	55.1
293	39.2	323	43.2	353	47.2	383	51.2	413	55.2
294	39.3	324	43.4	354	47.4	384	51.4	414	55.4
295	39.5	325	43.5	355	47.5	385	51.5	415	55.5
296	39.6	326	43.6	356	47.6	386	51.6	416	55.6
297	39.7	327	43.8	357	47.8	387	51.8	417	56.8
298	39.9	328	43.9	358	47.9	388	51.9	418	56.9

27° GRAVITY.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
267	35.9	297	40.	327	44.	357	48.1	387	52.1
268	36.1	298	40.1	328	44.2	358	48.2	388	52.2
269	36.2	299	40.3	329	44.3	359	48.3	389	52.4
270	36.3	300	40.4	330	44.4	360	48.5	390	52.5
271	36.5	301	40.5	331	44.6	361	48.6	391	52.6
272	36.6	302	40.7	332	44.7	362	48.7	392	52.8
273	36.7	303	40.8	333	44.8	363	48.9	393	52.9
274	36.9	304	40.9	334	45.	364	49.	394	53.
275	37.	305	41.1	335	45.1	365	49.1	395	53.2
276	37.2	306	41.2	336	45.2	366	49.3	396	53.3
277	37.3	307	41.3	337	45.4	367	49.4	397	53.4
278	37.4	308	41.5	338	45.5	368	49.5	398	53.6
279	37.6	309	41.6	339	45.6	369	49.7	399	53.7
280	37.7	310	41.7	340	45.8	370	49.8	400	53.9
281	37.8	311	41.9	341	45.9	371	49.9	401	54.
282	38.	312	42.	342	46.	372	50.1	402	54.1
283	38.1	313	42.1	343	46.2	373	50.2	403	54.3
284	38.2	314	42.3	344	46.3	374	50.3	404	54.4
285	38.4	315	42.4	345	46.4	375	50.5	405	54.5
286	38.5	316	42.5	346	46.6	376	50.6	406	54.7
287	38.6	317	42.7	347	46.7	377	50.7	407	54.8
288	38.8	318	42.8	348	46.8	378	50.9	408	54.9
289	38.9	319	42.9	349	47.	379	51.	409	55.1
290	39.	320	43.1	350	47.1	380	51.2	410	55.2
291	39.2	321	43.2	351	47.3	381	51.3	411	55.3
292	39.3	322	43.3	352	47.4	382	51.4	412	55.5
293	39.4	323	43.5	353	47.5	383	51.6	413	55.6
294	39.6	324	43.6	354	47.7	384	51.7	414	55.7
295	39.7	325	43.7	355	47.8	385	51.8	415	56.9
296	39.9	326	43.9	356	47.9	386	52.	416	56.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
265	35.9	295	40.	325	44.	355	48.1	385	52.1
266	36.	296	40.1	326	44.2	356	48.2	386	52.3
267	36.2	297	40.2	327	44.3	357	48.4	387	52.4
268	36.3	298	40.4	328	44.4	358	48.5	388	52.6
269	36.5	299	40.5	329	44.6	359	48.6	389	52.7
270	36.6	300	40.6	330	44.7	360	48.8	390	52.8
271	36.7	301	40.8	331	44.8	361	48.9	391	53.
272	36.9	302	40.9	332	45.	362	49.	392	53.1
273	37.	303	41.1	333	45.1	363	49.2	393	53.2
274	37.1	304	41.2	334	45.2	364	49.3	394	53.4
275	37.3	305	41.3	335	45.4	365	49.5	395	53.5
276	37.4	306	41.5	336	45.5	366	49.6	396	53.6
277	37.5	307	41.6	337	45.7	367	49.7	397	53.8
278	37.7	308	41.7	338	45.8	368	49.9	398	53.9
279	37.8	309	41.9	339	45.9	369	50.	399	54.1
280	37.9	310	42.	340	46.1	370	50.1	400	54.2
281	38.1	311	42.1	341	46.2	371	50.3	401	54.3
282	38.2	312	42.3	342	46.3	372	50.4	402	54.5
283	38.4	313	42.4	343	46.5	373	50.5	403	54.6
284	38.5	314	42.5	344	46.6	374	50.7	404	54.7
285	38.6	315	42.7	345	46.7	375	50.8	405	54.9
286	38.8	316	42.8	346	46.9	376	50.9	406	55.
287	38.9	317	42.9	347	47.	377	51.1	407	55.1
288	39.	318	43.1	348	47.1	378	51.2	408	55.3
289	39.2	319	43.2	349	47.3	379	51.3	409	55.4
290	39.3	320	43.4	350	47.4	380	51.5	410	55.5
291	39.4	321	43.5	351	47.6	381	51.6	411	55.7
292	39.6	322	43.6	352	47.7	382	51.8	412	55.8
293	39.7	323	43.8	353	47.8	383	51.9	413	56.
294	39.8	324	43.9	354	48.	384	52.	414	56.1

29° GRAVITY.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
263	35.9	293	40.	323	44.	353	48.1	383	52.2
264	36.	294	40.1	324	44.2	354	48.3	384	52.4
265	36.1	295	40.2	325	44.3	355	48.4	385	52.5
266	36.3	296	40.4	326	44.5	356	48.5	386	52.6
267	36.4	297	40.5	327	44.6	357	48.7	387	52.8
268	36.5	298	40.6	328	44.7	358	48.8	388	52.9
269	36.7	299	40.8	329	44.9	359	49.	389	53.
270	36.8	300	40.9	330	45.	360	49.1	390	53.2
271	36.9	301	41.	331	45.1	361	49.2	391	53.3
272	37.1	302	41.2	332	45.3	362	49.4	392	53.4
273	37.2	303	41.3	333	45.4	363	49.5	393	53.6
274	37.4	304	41.5	334	45.5	364	49.6	394	53.7
275	37.5	305	41.6	335	45.7	365	49.8	395	53.9
276	37.6	306	41.7	336	45.8	366	49.9	396	54.
277	37.8	307	41.9	337	45.9	367	50.	397	54.1
278	37.9	308	42.	338	46.1	368	50.2	398	54.3
279	38.	309	42.1	339	46.2	369	50.3	399	54.4
280	38.2	310	42.3	340	46.4	370	50.4	400	54.5
281	38.3	311	42.4	341	46.5	371	50.6	401	54.7
282	38.5	312	42.5	342	46.6	372	50.7	402	54.8
283	38.6	313	42.7	343	46.8	373	50.8	403	54.9
284	38.7	314	42.8	344	46.9	374	51.	404	55.1
285	38.9	315	42.9	345	47.	375	51.1	405	55.2
286	39.	316	43.1	346	47.2	376	51.3	406	55.4
287	39.1	317	43.2	347	47.3	377	51.4	407	55.5
288	39.3	318	43.4	348	47.4	378	51.5	408	55.6
289	39.4	319	43.5	349	47.6	379	51.7	409	55.8
290	39.5	320	43.6	350	47.7	380	51.8	410	55.9
291	39.7	321	43.8	351	47.9	381	52.	411	56.
292	39.8	322	43.9	352	48.	382	52.1	412	56.2

30° GRAVITY.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
262	35.9	292	40.1	322	44.2	352	48.3	382	52.4
263	36.1	293	40.2	323	44.3	353	48.4	383	52.5
264	36.2	294	40.3	324	44.4	354	48.6	384	52.7
265	36.4	295	40.5	325	44.6	355	48.7	385	52.8
265	36.5	296	40.6	326	44.7	356	48.8	386	52.9
267	36.6	297	40.8	327	44.8	357	49.	387	53.1
268	36.7	298	40.9	328	45.	358	49.1	388	53.2
269	36.9	299	41.	329	45.1	359	49.3	389	53.4
270	37.	300	41.2	330	45.3	360	49.4	390	53.5
271	37.2	301	41.3	331	45.4	361	49.5	391	53.6
272	37.3	302	41.4	332	45.5	362	49.7	392	53.8
273	37.5	303	41.6	333	45.7	363	49.8	393	53.9
274	37.6	304	41.7	334	45.8	364	49.9	394	54.1
275	37.7	305	41.8	335	46.	365	50.1	395	54.2
276	37.9	306	42.	336	46.1	366	50.2	396	54.3
277	38.	307	42.1	337	46.2	367	50.4	397	54.5
278	38.1	308	42.3	338	46.4	368	50.5	398	54.6
279	38.3	309	42.4	339	46.5	369	50.6	399	54.7
280	38.4	310	42.5	340	46.6	370	50.8	400	54.9
281	38.6	311	42.7	341	46.8	371	50.9	401	55.
282	38.7	312	42.8	342	46.9	372	51.	402	55.1
283	38.8	313	42.9	343	47.1	373	51.2	403	55.3
284	39.	314	43.1	344	47.2	374	51.3	404	55.4
285	39.1	315	43.2	345	47.3	375	51.4	405	55.6
286	39.2	316	43.4	346	47.5	376	51.6	406	55.7
287	39.4	317	43.5	347	47.6	377	51.7	407	55.8
288	39.5	318	43.6	348	47.7	378	51.9	408	56.
289	39.7	319	43.8	349	47.9	379	52.	409	56.1
290	39.8	320	43.9	350	48.	380	52.1	410	56.2
291	39.9	321	44.	351	48.2	381	52.3	411	56.4

31° GRAVITY.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
260	35.9	290	40.	320	44.2	350	48.3	380	52.5
261	36.	291	40.2	321	44.3	351	48.5	381	52.6
262	36.2	292	40.3	322	44.5	352	48.6	382	52.7
263	36.3	293	40.4	323	44.6	353	48.7	383	52.9
264	36.5	294	40.6	324	44.7	354	48.9	384	53.
265	36.6	295	40.7	325	44.9	355	49.	385	53.2
266	36.7	296	40.9	326	45.	356	49.2	386	53.3
267	36.9	297	41.	327	45.2	357	49.3	387	53.4
268	37.	298	41.1	328	45.3	358	49.4	388	53.6
269	37.1	299	41.3	329	45.4	359	49.6	389	53.7
270	37.3	300	41.4	330	45.6	360	49.7	390	53.8
271	37.4	301	41.6	331	45.7	361	49.8	391	54.
272	37.6	302	41.7	332	45.8	362	50.	392	54.1
273	37.7	303	41.8	333	46.	363	50.1	393	54.3
274	37.8	304	42.	334	46.1	364	50.3	394	54.4
275	38.	305	42.1	335	46.3	365	50.4	395	54.5
276	38.1	306	42.3	336	46.4	366	50.5	396	54.7
277	38.2	307	42.4	337	46.5	367	50.7	397	54.8
278	38.4	308	42.5	338	46.7	368	50.8	398	54.9
279	38.5	309	42.7	339	46.8	369	50.9	399	55.1
280	38.7	310	42.8	340	46.9	370	51.1	400	55.2
281	38.8	311	42.9	341	47.1	371	51.2	401	55.4
282	38.9	312	43.1	342	47.2	372	51.4	402	55.5
283	39.1	313	43.2	343	47.4	373	51.5	403	55.6
284	39.2	314	43.4	344	47.5	374	51.6	404	55.8
285	39.3	315	43.5	345	47.6	375	51.8	405	55.9
286	39.5	316	43.6	346	47.8	376	51.9	406	56.1
287	39.6	317	43.8	347	47.9	377	52.1	407	56.2
288	39.8	318	43.9	348	48.	378	52.2	408	56.3
289	39.9	319	44.	349	48.2	379	52.3	409	56.5

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
258	35.8	288	40.	318	44.2	348	48.3	378	52.5
259	36.	289	40.1	319	44.3	349	48.5	379	52.6
260	36.1	290	40.3	320	44.5	350	48.6	380	52.8
261	36.3	291	40.4	321	44.6	351	48.8	381	52.9
262	36.4	292	40.6	322	44.7	352	48.9	382	53.1
263	36.5	293	40.7	323	44.9	353	49.	383	53.2
264	36.7	294	40.8	324	45.	354	49.2	384	53.3
265	36.8	295	41.	325	45.1	355	49.3	385	53.5
266	36.9	296	41.1	326	45.3	356	49.4	386	53.6
267	37.1	297	41.3	327	45.4	357	49.6	387	53.8
268	37.2	298	41.4	328	45.6	358	49.7	388	53.9
269	37.4	299	41.5	329	45.7	359	49.9	389	54.
270	37.5	300	41.7	330	45.8	360	50.	390	54.2
271	37.6	301	41.8	331	46.	361	50.1	391	54.3
272	37.8	302	42.	332	46.1	362	50.3	392	54.5
273	37 9	303	42.1	333	46.3	363	50.4	393	54.6
274	38.1	304	42.2	334	46.4	364	50.6	394	54.7
275	38.2	305	42.4	335	46.5	365	50.7	395	54.9
276	38.3	306	42.5	336	46.7	366	50.8	396	55.
277	38.5	307	42.6	337	46.8	367	51.	397	55.1
278	38.6	308	42.8	338	47.	368	51.1	398	55.3
279	38.7	309	42.9	339	47.1	369	51.3	399	55.4
280	38.9	310	43.1	340	47.2	370	51.4	400	55.6
281	39.	311	43.2	341	47.4	371	51.5	401	55.7
282	39.2	312	43.3	342	47.5	372	51.7	402	55.8
283	39.3	313	43.5	343	47.7	373	51.8	403	56.
284	39.5	314	43.6	344	47.8	374	52.	404	56.1
285	39.6	315	43.8	345	47.9	375	52.1	405	56.3
286	39.7	316	43.9	346	48.1	376	52.2	406	56.4
287	39.9	317	44.	347	48.2	377	52.4	407	56.5

33° GRAVITY.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	G
257	35.9	287	40.1	317	44.3	347	48.5	377	5
258	36.1	288	40.3	318	44.5	348	48.6	378	5
259	36.2	289	40.4	319	44.6	349	48.8	379	5
260	36.3	290	40.5	320	44.7	350	48.9	380	5
261	36.5	291	40.7	321	44.9	351	49.1	381	5
262	36.6	292	40.8	322	45.	352	49.2	382	5
263	36.8	293	41.	323	45.2	353	49.3	383	5
264	36.9	294	41.1	324	45.3	354	49.5	384	5
265	37.	295	41.2	325	45.4	355	49.6	385	5
266	37.2	296	41.4	326	45.6	356	49.8	386	5
267	37.3	297	41.5	327	45.7	357	49.9	387	5
268	37.5	298	41.7	328	45.9	358	50.	388	5
269	37.6	299	41.8	329	46.	359	50.1	389	5
270	37.7	300	41.9	330	46.1	360	50.3	390	5
271	37.9	301	42.1	331	46.3	361	50.5	391	5
272	38.	302	42.2	332	46.4	362	50.6	392	5
273	38.2	303	42.4	333	46.5	363	50.7	393	5
274	38.3	304	42.5	334	46.7	364	50.9	394	5
275	38.4	305	42.6	335	46.8	365	51.	395	5
276	38.6	306	42.8	336	47.	366	51.2	396	5
277	38.7	307	42.9	337	47.1	367	51.3	397	5
278	38.9	308	43.1	338	47.2	368	51.4	398	5
279	39.	309	43.2	339	47.4	369	51.6	399	5
280	39.1	310	43.3	340	47.5	370	51.7	400	5
281	39.3	311	43.5	341	47.7	371	51.9	401	5
282	39.4	312	43.6	342	47.8	372	52.	402	5
283	39.6	313	43.8	343	47.9	373	52.1	403	5
284	39.7	314	43.9	344	48.1	374	52.3	404	5
285	39.8	315	44.	345	48.2	375	52.4	405	5
286	40.	316	44.2	346	48.4	376	52.6	406	5

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
255	35.9	285	40.1	315	44.3	345	48.5	375	52.7
256	36.	286	40.2	316	44.4	346	48.7	376	52.9
257	36.1	287	40.4	317	44.5	347	48.8	377	53.
258	36.3	288	40.5	318	44.7	348	49.	378	53.2
259	36.4	289	40.6	319	44.9	349	49.1	379	53.3
260	36.6	290	40.8	320	45.	350	49.2	380	53.4
261	36.7	291	40.9	321	45.1	351	49.4	381	53.6
262	36.8	292	41.1	322	45.3	352	49.5	382	53.7
263	37.	293	41.2	323	45.4	353	49.6	383	53.9
264	37.1	294	41.3	324	45.6	354	49.8	384	54.
265	37.3	295	41.5	325	45.7	355	49.9	385	54.1
266	37.4	296	41.6	326	45.8	356	50.1	386	54.3
267	37.5	297	41.8	327	46.	357	50.2	387	54.4
268	37.7	298	41.9	328	46.1	358	50.4	388	54.6
269	37.8	299	42.1	329	46.3	359	50.5	389	54.7
270	38.	300	42.2	330	46.4	360	50.6	390	54.9
271	38.1	301	42.3	331	46.6	361	50.8	391	55.
272	38.2	302	42.5	332	46.7	362	50.9	392	55.1
273	38.4	303	42.6	333	46.8	363	51.1	393	55.3
274	38.5	304	42.8	334	47.	364	51.2	394	55.4
275	38.7	305	42.9	335	47.1	365	51.3	395	55.6
276	38.8	306	43.	336	47.3	366	51.5	396	55.7
277	38.9	307	43.2	337	47.4	367	51.6	397	55.8
278	39.1	308	43.3	338	47.5	368	51.8	398	56.
279	39.2	309	43.5	339	47.7	369	51.9	399	56.1
280	39.4	310	43.6	340	47.8	370	52.	400	56.3
281	39.5	311	43.7	341	48.	371	52.2	401	56.4
282	39.7	312	43.9	342	48.1	372	52.3	402	56.5
283	39.8	313	44.	343	48.2	373	52.5	403	56.7
284	49.9	314	44.2	344	48.4	374	52.6	404	56.8

35° GRAVITY.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
254	35.9	284	40.2	314	44.4	344	48.7	374	52.9
255	36.1	285	40.3	315	44.6	345	48.8	375	53.1
256	36.2	286	40.5	316	44.7	346	49.	376	53.2
257	36.4	287	40.6	317	44.9	347	49.1	377	53.4
258	36.5	288	40.8	318	45.	348	49.2	378	53.5
259	36.6	289	40.9	319	45.1	349	49.4	379	53.6
260	36.8	290	41.	320	45.3	350	49.5	380	53.8
261	36.9	291	41.2	321	45.4	351	49.7	381	53.9
262	37.1	292	41.3	322	45.6	352	49.8	382	54.1
263	37.2	293	41.5	323	45.7	353	50.	383	54.2
264	37.4	294	41.6	324	45.9	354	50.1	384	54.3
265	37.5	295	41.7	325	46.	355	50.2	385	54.5
266	37.6	296	41.9	326	46.1	356	50.4	386	54.6
267	37.8	297	42.	327	46.3	357	50.5	387	54.8
268	37.9	298	42.2	328	46.4	358	50.7	388	54.9
269	38.1	299	42.3	329	46.6	359	50.8	389	55.
270	38.2	300	42.5	330	46.7	360	50.9	390	55.2
271	38.4	301	42.6	331	46.8	361	51.1	391	55.3
272	38.5	302	42.7	332	47.	362	51.2	392	55.5
273	38.6	303	42.9	333	47.1	363	51.4	393	55.6
274	38.8	304	43.	334	47.3	364	51.5	394	55.8
275	38.9	305	43.2	335	47.4	365	51.7	395	55.9
276	39.1	306	43.3	336	47.6	366	51.8	396	56.
277	39.2	307	43.4	337	47.7	367	51.9	397	56.2
278	39.3	308	43.6	338	47.8	368	52.1	398	56.3
279	39.5	309	43.7	339	48.	369	52.2	399	56.5
280	39.7	310	43.9	340	48.1	370	52.4	400	56.6
281	39.8	311	44.	341	48.3	371	52.5	401	56.7
282	39.9	312	44.1	342	48.4	372	52.6	402	56.9
283	40.1	313	44.3	343	48.5	373	52.8	403	57.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
246	35.9	276	40.2	306	44.6	336	49.	366	53.4
247	36.	277	40.4	307	44.8	337	49.1	367	53.5
248	36.2	278	40.5	308	44.9	338	49.3	368	53.7
249	36.3	279	40.7	309	45.	339	49.4	369	53.8
250	36.5	280	40.8	310	45.2	340	49.6	370	53.9
251	36.6	281	41.	311	45.3	341	49.7	371	54.1
252	36.7	282	41.1	312	45.5	342	49.9	372	54.2
253	36.9	283	41.3	313	45.6	343	50.	373	54.4
254	37.	284	41.4	314	45.8	344	50.1	374	54.5
255	37.2	285	41.6	315	45.9	345	50.3	375	54.7
256	37.3	286	41.7	316	46.1	346	50.4	376	54.8
257	37.5	287	41.8	317	46.2	347	50.6	377	55.
258	37.6	288	42.	318	46.4	348	50.7	378	55.1
259	37.8	289	42.1	319	46.5	349	50.9	379	55.2
260	37.9	290	42.3	320	46.7	350	51.	380	55.4
261	38.1	291	42.4	321	46.8	351	51.2	381	55.5
262	38.2	292	42.6	322	46.9	352	51.3	382	55.7
263	38.4	293	42.7	323	47.1	353	51.5	383	55.8
264	38.5	294	42.9	324	47.2	354	51.6	384	56.
265	38.6	295	43.	325	47.4	355	51.8	385	56.1
266	38.8	296	43.2	326	47.5	356	51.9	386	56.3
267	38.9	297	43.3	327	47.7	357	52.	387	56.4
268	39.1	298	43.5	328	47.8	358	52.2	388	56.6
269	39.2	299	43.6	329	48.	359	52.3	389	56.7
270	39.4	300	43.7	330	48.1	360	52.5	390	56.9
271	39.5	301	43.9	331	48.3	361	52.6	391	57.
272	39.7	302	44.	332	48.4	362	52.8	392	57.1
273	39.8	303	44.2	333	48.5	363	52.9	393	57.3
274	39.9	304	44.3	334	48.7	364	53.1	394	57.4
275	40.1	305	44.5	335	48.8	365	53.2	395	57.6

43° GRAVITY.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
242	35.9	272	40.4	302	44.8	332	49.3	362	53.7
243	36.1	273	40.5	303	45.	333	49.4	363	53.8
244	36.2	274	40.6	304	45.1	334	49.5	364	53.9
245	36.3	275	40.8	305	45.2	335	49.7	365	54.1
246	36.5	276	40.9	306	45.4	336	49.8	366	54.2
247	36.6	277	41.1	307	45.5	337	50.	367	54.4
248	36.8	278	41.2	308	45.7	338	50.1	368	54.5
249	36.9	279	41.4	309	45.8	339	50.3	369	54.7
250	37.1	280	41.5	310	46.	340	50.4	370	54.9
251	37.2	281	41.7	311	46.1	341	50.6	371	55.
252	37.4	282	41.8	312	46.3	342	50.7	372	55.2
253	37.5	283	42.	313	46.4	343	50.9	373	55.3
254	37.7	284	42.1	314	46.6	344	51.	374	55.5
255	37.8	285	42.3	315	46.7	345	51.2	375	55.6
256	38.	286	42.4	316	46.9	346	51.3	376	55.8
257	38.1	287	42.6	317	47.	347	51.5	377	55.9
258	38.3	288	42.7	318	47.2	348	51.6	378	56.1
259	38.4	289	42.9	319	47.3	349	51.8	379	56.2
260	38.6	290	43.	320	47.5	350	51.9	380	56.4
261	38.8	291	43.2	321	47.6	351	52.1	381	56.5
262	39.	292	43.3	322	47.8	352	52.2	382	56.7
263	39.1	293	43.5	323	47.9	353	52.4	383	56.8
264	39.3	294	43.6	324	48.1	354	52.5	384	57.
265	39.4	295	43.8	325	48.2	355	52.7	385	57.1
266	39.6	296	43.9	326	48.4	356	52.8	386	57.3
267	39.7	297	44.1	327	48.5	357	53.	387	57.4
268	39.9	298	44.2	328	48.7	358	53.1	388	57.6
269	40.	299	44.4	329	48.8	359	53.3	389	57.7
270	40.1	300	44.5	330	49.	360	53.4	390	57.9
271	40.2	301	44.7	331	49.1	361	53.5	391	58.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
240	35.8	270	40.2	300	44.7	330	49.2	360	53.7
241	35.9	271	40.4	301	44.9	331	49.3	361	53.8
242	36.1	272	40.5	302	45.	332	49.5	362	54.
243	36.2	273	40.7	303	45.2	333	49.6	363	54.1
244	36.4	274	40.8	304	45.3	334	49.8	364	54.3
245	36.5	275	41.	305	45.5	335	49.9	365	54.4
246	36.7	276	41.1	306	45.6	336	50.1	366	54.6
247	36.8	277	41.3	307	45.8	337	50.2	367	54.7
248	37.	278	41.4	308	45.9	338	50.4	368	54.9
249	37.1	279	41.6	309	46.1	339	50.5	369	55.
250	37.3	280	41.7	310	46.2	340	50.7	370	55.2
251	37.4	281	41.9	311	46.4	341	50.8	371	55.3
252	37.6	282	42.	312	46.5	342	51.	372	55.5
253	37.7	283	42.2	313	46.7	343	51.1	373	55.6
254	37.9	284	42.3	314	46.8	344	51.3	374	55.8
255	38.	285	42.5	315	47.	345	51.4	375	55.9
256	38.2	286	42.6	316	47.1	346	51.6	376	56.
257	38.3	287	42.7	317	47.3	347	51.7	377	56.2
258	38.5	288	42.9	318	47.4	348	51.9	378	56.3
259	38.6	289	43.1	319	47.6	349	52.	379	56.5
260	38.8	290	43.2	320	47.7	350	52.2	380	56.6
261	38.9	291	43.4	321	47.9	351	52.3	381	56.8
262	39.1	292	43.5	322	48.	352	52.5	382	56.9
263	39.2	293	43.7	323	48.2	353	52.6	383	57.1
264	39.4	294	43.8	324	48.3	354	52.8	384	57.2
265	39.5	295	44.	325	48.5	355	52.9	385	57.4
266	39.6	296	44.1	326	48.6	356	53.1	386	57.5
267	39.8	297	44.3	327	48.7	357	53.2	387	57.7
268	39.9	298	44.4	328	48.9	358	53.4	388	57.8
269	40.1	299	44.6	329	49.	359	53.5	389	58.

45° GRAVITY

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
240	36.	270	40.5	300	45.	330	49.5	360	54.
241	36.2	271	40.7	301	45.2	331	49.7	361	54.2
242	36.3	272	40.8	302	45.3	332	49.8	362	54.3
243	36.5	273	41.	303	45.5	333	50.	363	54.5
244	36.6	274	41.1	304	45.6	334	50.1	364	54.6
245	36.8	275	41.3	305	45.8	335	50.2	365	54.8
246	36.9	276	41.4	306	45.9	336	50.4	366	54.9
247	37.1	277	41.6	307	46.1	337	50.6	367	55.1
248	37.2	278	41.7	308	46.2	338	50.7	368	55.2
249	37.4	279	41.9	309	46.4	339	50.9	369	55.4
250	37.5	280	42.	310	46.5	340	51.	370	55.5
251	37.7	281	42.2	311	46.7	341	51.2	371	55.7
252	37.8	282	42.3	312	46.8	342	51.3	372	55.8
253	38.	283	42.5	313	47.	343	51.5	373	56.
254	38.1	284	42.6	314	47.1	344	51.6	374	56.1
255	38.3	285	42.8	315	47.3	345	51.8	375	56.3
256	38.4	286	42.9	316	47.4	346	51.9	376	56.4
257	38.6	287	43.1	317	47.6	347	52.1	377	56.6
258	38.7	288	43.2	318	47.7	348	52.2	378	56.7
259	38.9	289	43.4	319	47.9	349	52.4	379	56.9
260	39.	290	43.5	320	48.	350	52.5	380	57.
261	39.2	291	43.7	321	48.2	351	52.7	381	57.2
262	39.3	292	43.8	322	48.3	352	52.8	382	57.3
263	39.5	293	44.	323	48.5	353	53.	383	57.5
264	39.6	294	44.1	324	48.6	354	53.1	384	57.6
265	39.8	295	44.3	325	48.8	355	53.3	385	57.8
266	39.9	296	44.4	326	48.9	356	53.4	386	57.9
267	40.1	297	44.6	327	49.1	357	53.6	387	58.1
268	40.2	298	44.7	328	49.2	358	53.7	388	58.2
269	40.4	299	44.9	329	49.4	359	53.9	389	58.4

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
238	35.9	268	40.4	298	45.	328	49.5	358	54.
239	36.1	269	40.6	299	45.1	329	49.7	359	54.2
240	36.2	270	40.7	300	45.3	330	49.8	360	54.3
241	36.4	271	40.9	301	45.4	331	50.	361	54.5
242	36.5	272	41.	302	45.6	332	50.1	362	54.6
243	36.7	273	41.2	303	45.7	333	50.3	363	54.8
244	36.8	274	41.3	304	45.9	334	50.4	364	54.9
245	37.	275	41.5	305	46.	335	50.6	365	55.1
246	37.1	276	41.7	306	46.2	336	50.7	366	55.2
247	37.3	277	41.8	307	46.3	337	50.9	367	55.4
248	37.4	278	42.	308	46.5	338	51.	368	55.5
249	37.6	279	42.1	309	46.6	339	51.2	369	55.7
250	37.7	280	42.3	310	46.8	340	51.3	370	55.8
251	37.9	281	42.4	311	46.9	341	51.5	371	56.
252	38.	282	42.6	312	47.1	342	51.6	372	56.1
253	38.2	283	42.7	313	47.2	343	51.8	373	56.3
254	38.3	284	42.9	314	47.4	344	51.9	374	56.4
255	38.5	285	43.	315	47.5	345	52.1	375	56.6
256	38.6	286	43.2	316	47.7	346	52.2	376	56.7
257	38.8	287	43.3	317	47.8	347	52.4	377	56.9
258	38.9	288	43.5	318	48.	348	52.5	378	57.
259	39.1	289	43.6	319	48.1	349	52.7	379	57.2
260	39.2	290	43.8	320	48.3	350	52.8	380	57.3
261	39.4	291	43.9	321	48.4	351	53.	381	57.5
262	39.5	292	44.1	322	48.6	352	53.1	382	57.6
263	39.7	293	44.2	323	48.7	353	53.3	383	57.8
264	39.8	294	44.4	324	48.9	354	53.4	384	57.9
265	40.	295	44.5	325	49.1	355	53.6	385	58.1
266	40.1	296	44.7	326	49.2	356	53.7	386	58.3
267	40.3	297	44.8	327	49.4	357	53.9	387	58.4

47° GRAVITY.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS
236	35.8	266	40.4	296	44.9	326	49.5	356	54.
237	36.	267	40.5	297	45.1	327	49.6	357	54.1
238	36.1	268	40.7	298	45.2	328	49.8	358	54.3
239	36.3	269	40.8	299	45.4	329	49.9	359	54.5
240	36.4	270	41.	300	45.5	330	50.1	360	54.6
241	36.6	271	41.1	301	45.7	331	50.2	361	54.8
242	36.7	272	41.3	302	45.8	332	50.4	362	54.9
243	36.9	273	41.4	303	46.	333	50.5	363	55.1
244	37.	274	41.6	304	46.1	334	50.7	364	55.2
245	37.2	275	41.7	305	46.3	335	50.8	365	55.4
246	37.3	276	41.9	306	46.4	336	51.	366	55.5
247	37.5	277	42.	307	46.6	337	51.1	367	55.7
248	37.6	278	42.2	308	46.7	338	51.3	368	55.8
249	37.8	279	42.4	309	46.9	339	51.5	369	56.
250	38.	280	42.5	310	47.1	340	51.6	370	56.2
251	38.1	281	42.7	311	47.2	341	51.8	371	56.3
252	38.3	282	42.8	312	47.4	342	51.9	372	56.5
253	38.4	283	43.	313	47.5	343	52.1	373	56.6
254	38.6	284	43.1	314	47.7	344	52.2	374	56.8
255	38.7	285	43.3	315	47.8	345	52.4	375	56.9
256	38.9	286	43.4	316	48.	346	52.5	376	57.1
257	39.	287	43.6	317	48.1	347	52.7	377	57.2
258	39.2	288	43.7	318	48.3	348	52.8	378	57.4
259	39.3	289	43.9	319	48.4	349	53.	379	57.5
260	39.5	290	44.	320	48.6	350	53.1	380	57.7
261	39.6	291	44.2	321	48.7	351	53.2	381	57.8
262	39.8	292	44.3	322	48.9	352	53.4	382	58.
263	39.9	293	44.5	323	49.	353	53.5	383	58.1
264	40.1	294	44.6	324	49.2	354	53.7	384	58.3
265	40.2	295	44.8	325	49.3	355	53.9	385	58.4

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
234	36.	264	40.8	294	45.4	324	50.	354	54.6
235	36.2	265	40.9	295	45.5	325	50.2	355	54.8
236	36.3	266	41.1	296	45.7	326	50.3	356	55.
237	36.5	267	41.2	297	45.8	327	50.5	357	55.1
238	36.6	268	41.4	298	46.	328	50.6	358	55.3
239	36.8	269	41.5	299	46.2	329	50.8	359	55.4
240	37.	270	41.7	300	46.3	330	50.9	360	55.6
241	37.2	271	41.8	301	46.5	331	51.1	361	55.7
242	37.4	272	42.	302	46.6	332	51.2	362	55.9
243	37.5	273	42.1	303	46.8	333	51.4	363	56.
244	37.6	274	42.3	304	46.9	334	51.6	364	56.2
245	37.8	275	42.4	305	47.1	335	51.7	365	56.3
246	38.	276	42.6	306	47.2	336	51.9	366	56.5
247	38.1	277	42.8	307	47.4	337	52.	367	56.6
248	38.3	278	42.9	308	47.5	338	52.2	368	56.8
249	38.4	279	43.1	309	47.7	339	52.3	369	57.
250	38.6	280	43.2	310	47.8	340	52.5	370	57.1
251	38.7	281	43.4	311	48.	341	52.6	371	57.3
252	38.9	282	43.5	312	48.2	342	52.8	372	57.4
253	39.1	283	43.7	313	48.3	343	52.9	373	57.6
254	39.2	284	43.8	314	48.5	344	53.1	374	57.7
255	39.4	285	44.	315	48.6	345	53.2	375	57.9
256	39.5	286	44.2	316	48.8	346	53.4	376	58.
257	39.7	287	44.3	317	48.9	347	53.6	377	58.2
258	39.8	288	44.5	318	49.1	348	53.7	378	58.3
259	40.	289	44.6	319	49.2	349	53.9	379	58.5
260	40.1	290	44.8	320	49.4	350	54.	380	58.7
261	40.3	291	44.9	321	49.5	351	54.2	381	58.8
262	40.4	292	45.1	322	49.7	352	54.3	382	59.
263	40.6	293	45.2	323	49.9	353	54.5	383	59.1

60° GRAVITY.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
220	35.8	250	40.7	280	45.6	310	50.5	340	55.4
221	36.	251	40.9	281	45.8	311	50.7	341	55.6
222	36.2	252	41.1	282	45.9	312	50.8	342	55.7
223	36.3	253	41.2	283	46.1	313	51.	343	55.9
224	36.5	254	41.4	284	46.3	314	51.2	344	56.
225	36.7	255	41.6	285	46.4	315	51.3	345	56.2
226	36.8	256	41.7	286	46.6	316	51.5	346	56.4
227	37.	257	41.9	287	46.8	317	51.6	347	56.5
228	37.1	258	42.1	288	46.9	318	51.8	348	56.7
229	37.3	259	42.3	289	47.1	319	52.	349	56.9
230	37.5	260	42.4	290	47.2	320	52.1	350	57.
231	37.6	261	42.5	291	47.4	321	52.3	351	57.2
232	37.8	262	42.7	292	47.6	322	52.5	352	57.4
233	38.	263	42.8	293	47.7	323	52.6	353	57.5
234	38.1	264	43.	294	47.9	324	52.8	354	57.7
235	38.3	265	43.2	295	48.1	325	53.	355	57.8
236	38.5	266	43.3	296	48.2	326	53.1	356	58.
237	38.6	267	43.5	297	48.4	327	53.3	357	58.2
238	38.8	268	43.7	298	48.5	328	53.4	358	58.3
239	38.9	269	43.8	299	48.7	329	53.6	359	58.5
240	39.1	270	44.	300	48.9	330	53.8	360	58.6
241	39.3	271	44.1	301	49.	331	53.9	361	58.8
242	39.4	272	44.3	302	49.2	332	54.1	362	59.
243	39.6	273	44.5	303	49.4	333	54.3	363	59.1
244	39.8	274	44.6	304	49.5	334	54.4	364	59.3
245	39.9	275	44.8	305	49.7	335	54.6	365	59.5
246	40.1	276	45.	306	49.9	336	54.7	366	59.6
247	40.2	277	45.1	307	50.	337	54.9	367	59.8
248	40.4	278	45.3	308	50.2	338	55.1	368	59.9
249	40.6	279	45.5	309	50.3	339	55.2	369	60.1

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
217	35.9	247	40.9	277	45.8	307	50.8	337	55.8
218	36.1	248	41.	278	46.	308	51.	338	55.9
219	36.2	249	41.2	279	46.2	309	51.1	339	56.1
220	36.4	250	41.4	280	46.3	310	51.3	340	56.3
221	36.6	251	41.5	281	46.5	311	51.5	341	56.4
222	36.7	252	41.7	282	46.7	312	51.6	342	56.6
223	36.9	253	41.9	283	46.8	313	51.8	343	56.8
224	37.1	254	42.	284	47.	314	52.	344	56.9
225	37.2	255	42.2	285	47.2	315	52.1	345	57.1
226	37.4	256	42.4	286	47.3	316	52.3	346	57.3
227	37.6	257	42.6	287	47.5	317	52.5	347	57.4
228	37.7	258	42.7	288	47.7	318	52.6	348	57.6
229	37.9	259	42.9	289	47.8	319	52.8	349	57.8
230	38.1	260	43.	290	48.	320	53.	350	57.9
231	38.2	261	43.2	291	48.1	321	53.1	351	58.1
232	38.4	262	43.4	292	48.3	322	53.3	352	58.3
233	38.6	263	43.5	293	48.5	323	53.5	353	58.4
234	38.7	264	43.7	294	48.6	324	53.6	354	58.6
235	38.9	265	43.9	295	48.8	325	53.8	355	58.8
236	39.1	266	44.	296	49.	326	54.	356	58.9
237	39.2	267	44.2	297	49.2	327	54.1	357	59.1
238	39.4	268	44.4	298	49.3	328	54.3	358	59.2
239	39.6	269	44.5	299	49.5	329	54.5	359	59.4
240	39.7	270	44.7	300	49.7	330	54.6	360	59.6
241	39.9	271	44.9	301	49.8	331	54.8	361	59.8
242	40.1	272	45.	302	50.	332	54.9	362	59.9
243	40.2	273	45.2	303	50.2	333	55.1	363	60.1
244	40.4	274	45.3	304	50.3	334	55.3	364	60.2
245	40.6	275	45.5	305	50.5	335	55.4	365	60.4
246	40.7	276	45.7	306	50.7	336	55.6	366	60.6

65° GRAVITY.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
214	35.8	244	40.8	274	45.8	304	50.8	334	55.9
215	36.	245	41.	275	46.	305	51.	335	56.
216	36.1	246	41.1	276	46.1	306	51.2	336	56.2
217	36.3	247	41.3	277	46.3	307	51.3	337	56.4
218	36.4	248	41.5	278	46.5	308	51.5	338	56.5
219	36.6	249	41.6	279	46.6	309	51.7	339	56.7
220	36.8	250	41.8	280	46.8	310	51.8	340	56.9
221	37.	251	42.	281	47.	311	52.	341	57.
222	37.1	252	42.1	282	47.2	312	52.2	342	57.2
223	37.3	253	42.3	283	47.3	313	52.3	343	57.4
224	37.5	254	42.5	284	47.5	314	52.5	344	57.5
225	37.6	255	42.6	285	47.7	315	52.7	345	57.7
226	37.8	256	42.8	286	47.8	316	52.8	346	57.9
227	38.	257	43.	287	48.	317	53.	347	58.
228	38.1	258	43.1	288	48.2	318	53.2	348	58.2
229	38.3	259	43.3	289	48.3	319	53.3	349	58.4
230	38.5	260	43.5	290	48.5	320	53.5	350	58.5
231	38.6	261	43.6	291	48.7	321	53.7	351	58.7
232	38.8	262	43.8	292	48.8	322	53.8	352	58.9
233	39.	263	44.	293	49.	323	54.	353	59.
234	39.1	264	44.1	294	49.2	324	54.2	354	59.2
235	39.3	265	44.3	295	49.3	325	54.3	355	59.4
236	39.5	266	44.5	296	49.5	326	54.5	356	59.5
237	39.6	267	44.6	297	49.7	327	54.7	357	59.7
238	39.8	268	44.8	298	49.8	328	54.8	358	59.9
239	40.	269	45.	299	50.	329	55.	359	60.
240	40.1	270	45.1	300	50.2	330	55.2	360	60.3
241	40.3	271	45.3	301	50.3	331	55.4	361	60.5
242	40.5	272	45.5	302	50.5	332	55.5	362	60.6
243	40.6	273	45.6	303	50.7	333	55.7	363	60.8

ILE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
)	36.	240	41.2	270	46.3	300	51.4	330	56.6
1	36.2	241	41.3	271	46.5	301	51.6	331	56.8
2	36.4	242	41.5	272	46.6	302	51.8	332	56.9
3	36.5	243	41.7	273	46.8	303	52.	333	57.1
4	36.7	244	41.9	274	47.	304	52.1	334	57.3
5	36.9	245	42.	275	47.2	305	52.3	335	57.4
6	37.1	246	42.2	276	47.3	306	52.5	336	57.6
7	37.2	247	42.4	277	47.5	307	52.6	337	57.8
8	37.4	248	42.5	278	47.7	308	52.8	338	58.
9	37.6	249	42.7	279	47.8	309	53.	339	58.1
)	37.7	250	42.9	280	48.	310	53.2	340	58.3
1	37.9	251	43.	281	48.2	311	53.3	341	58.5
2	38.1	252	43.2	282	48.4	312	53.5	342	58.6
3	38.2	253	43.4	283	48.5	313	53.7	343	58.8
4	38.4	254	43.6	284	48.7	314	53.9	344	59.
5	38.6	255	43.7	285	48.9	315	54.	345	59.2
6	38.8	256	43.9	286	49.1	316	54.2	346	59 3
7	38.9	257	44.1	287	49.2	317	54.4	347	59.5
8	39.1	258	44.2	288	49.4	318	54.5	348	59.7
9	39.3	259	44.4	289	49.6	319	54.7	349	59.8
)	39.4	260	44.6	290	49.7	320	54.9	350	60.
1	39.6	261	44.8	291	49.9	321	55.	351	60.2
2	39.8	262	44.9	292	50.1	322	55.2	352	60.4
3	40.	263	45.1	293	50.2	323	55.4	353	60.5
4	40.1	264	45.3	294	50.4	324	55.6	354	60.7
5	40.3	265	45.5	295	50.6	325	55 7	355	60.9
6	40.5	266	45.6	296	50.8	326	55.9	356	61.
7	40.6	267	45.8	297	50.9	327	56.1	357	61.2
8	40.8	268	46.	298	51.1	328	56.2	358	61.4
9	41.	269	46.1	299	51.3	329	56.4	359	61.6

85° GRAVITY.

TABLE OF COMPARATIVE WEIGHTS AND MEASURES OF OIL.

LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.	LBS.	GALS.
195	36.	225	41.5	255	47.	285	52.5	315	58.1
196	36.1	226	41.7	256	47.2	286	52.7	316	58.3
197	36.3	227	41.9	257	47.4	287	52.9	317	58.4
198	36.5	228	42.	258	47.6	288	53.1	318	58.6
199	36.7	229	42.2	259	47.8	289	53.3	319	58.8
200	36.9	230	42.4	260	47.9	290	53.5	320	59.
201	37.1	231	42.6	261	48.1	291	53.6	321	59.2
202	37.2	232	42.8	262	48.3	292	53.8	322	59.4
203	37.4	233	43.	263	48.5	293	54.	323	59.6
204	37.6	234	43.1	264	48.7	294	54.2	324	59.7
205	37.8	235	43.3	265	48.9	295	54.4	325	59.9
206	38.	236	43.5	266	49.	296	54.6	326	60.1
207	38.2	237	43.7	267	49.2	297	54.8	327	60.3
208	38.4	238	43.9	268	49.4	298	54.9	328	60.5
209	38.5	239	44.1	269	49.6	299	55.1	329	60.7
210	38.7	240	44.2	270	49.8	300	55.3	330	60.8
211	38.9	241	44.4	271	50.	301	55.5	331	61.
212	39.1	242	44.6	272	50.1	302	55.7	332	61.2
213	39.3	243	44.8	273	50.3	303	55.9	333	61.4
214	39.5	244	45.	274	50.5	304	56.1	334	61.6
215	39.6	245	45.2	275	50.7	305	56.2	335	61.8
216	39.8	246	45.4	276	50.9	306	56.4	336	62.
217	40.	247	45.5	277	51.1	307	56.6	337	62.1
218	40.2	248	45.7	278	51.3	308	56.8	338	62.3
219	40.4	249	45.9	279	51.4	309	57.	339	62.5
220	40.6	250	46.1	280	51.6	310	57.2	340	62.7
221	40.7	251	46.3	281	51.8	311	57.3	341	62.9
222	40.9	252	46.5	282	52.	312	57.5	342	63.1
223	41.1	253	46.6	283	52.2	313	57.7	343	63.2
224	41.3	254	46.8	284	52.4	314	57.9	344	63.4

Corresponding to each Degree of Baumé's Hydrometer. Also, the number of Pounds contained in one U. S. Gallon at 60 ° Fah.

Deg. Baumé.	Deg. Sp. Grav.	Lbs. in 1 Gal.	Deg. Baumé.	Deg. Sp. Grav.	Lbs. in 1 Gal.
10	1.0000	8.33	43	.8092	6.74
11	.9929	8.27	44	.8045	6 70
12	.9859	8.21	45	.8000	6.66
13	.9790	8.16	46	.7954	6 63
14	.9722	8.10	47	.7909	6.59
15	.9655	8.04	48	.7865	6.55
16	.9589	7.99	49	.7821	6.52
17	.9523	7 93	50	.7777	6.48
18	.9459	7.88	51	.7734	6.44
19	.9395	7.83	52	.7692	6.41
20	.9333	7.78	53	.7650	6.37
21	.9271	7 72	54	.7608	6.34
22	.9210	7.67	55	.7567	6.30
23	.9150	7.62	56	.7526	6.27
24	.9090	7.57	57	.7486	6.24
25	.9032	7.53	58	.7446	6.20
26	.8974	7.48	59	.7407	6.17
27	.8917	7.43	60	.7368	6.14
28	.8860	7.38	61	.7329	6.11
29	.8805	7.34	62	.7290	6.07
30	.8750	7.29	63	.7253	6.04
31	.8695	7.24	64	.7216	6.01
32	.8641	7.20	65	.7179	5.98
33	.8588	7.15	66	.7142	5.95
34	.8536	7.11	67	.7106	5.92
35	.8484	7.07	68	.7070	5.89
36	.8433	7.03	69	.7035	5.86
37	.8383	6.98	70	.7000	5.83
38	.8333	6.94	75	.6829	5.69
39	.8284	6.90	80	.6666	5.55
40	.8235	6.86	85	.6511	5.42
41	.8187	6.82	90	.6363	5.30
42	.8139	6.78	95	.6222	5.18

Of various fluids to which the preceding Tables are applicable.

PETROLEUM PRODUCTS.

	Deg. Sp. Grav.	Deg. Baumé.	Lbs. in 1 Gal.	Lbs. in 1 Cu. Ft.
Rhigoline	.6222	95	5.18	38.89
Benzine or Gasoline	.6511	85	5.42	40.69
C. Naphtha	.7000	70	5.83	43.75
B. Naphtha	.7106	67	5.92	44.41
A. Naphtha	.7179	65	5.98	44.87
Kerosene Oil	.8000	45	6.66	50.00
Water	1.0000	10	8.33	62.50
Castor Oil	.9639	15	8.03	60.24
Linseed " boiled	.9411	19	7.84	58.81
" " raw	.9299	21	7.75	58.12
Menhaden, light	.9325	20	7.77	58.28
" dark	.9292	21	7.74	58.08
Cotton Seed	.9302	21	7.75	58.14
Hemp Seed	.9307	20	7.75	58.17
Cod Liver	.9270	21	7.72	57.94
Whale	.9254	21	7.71	57 84
Sunflower Seed	.9250	21	7.70	57.81
Poppy Seed	.9243	21	7.70	57.77
Fish	.9205	22	7.67	57 53
Olive	.9192	22	7.65	57.45
Almond	.9180	23	7 65	57.38
Lard	.9175	23	7.64	57.34
Rape Seed	.9155	23	7.63	57.22
Neatsfoot	.9142	23	7.62	57.14
Colza	.9136	23	7.61	57.10
Palm	.9046	25	7.54	56.54
Sperm, natural	.8815	29	7.34	55.09
" bleached	.8813	29	7.34	55.08
Spirits Turpentine	.8600	33	7.16	53.75
Alcohol, 90 %	.8228	40	6.85	51.43
" 95 %	.8089	43	6.74	50.56
" absolute,	.7938	46	6.61	49.61

NOTE--In the column marked Baume, the nearest whole number is given, omitting fractions.

MEMORANDA.

One U. S. Gallon of pure Water—231 cu. in.—contains 58.318 grs. = ... 8.331 lbs. av.

One Imperial Gallon of pure Water—277.276 cu. in.—contains 70.000 grs. = ... 10.000 "

One Cubic Foot of pure Water at 60° F. contains 1.000 oz. = ... 62.5 "

To reduce Imperial Gallons to U. S. Gallons, ~~divide~~ by 1.2*

To reduce U. S. Gallons to Imperial Gallons, ~~multiply~~ by 1.2*

To reduce U. S. Gallons to Cubic Feet, divide by 7.5*

To reduce Cubic Feet to U. S. Gallons, multiply by 7.5*

To find the number of Pounds Avoirdupois in one Cubic Foot of any substance, multiply its Specific Gravity by 62.5

To find the degree Baumé corresponding to any Specific Gravity:

$$\frac{140}{\text{Sp. Gr.}} - 130 = \text{B.}^{\circ}$$

To find the Specific Gravity corresponding to any degree Baumé:

$$\frac{140}{130 + \text{B.}^{\circ}} = \text{Sp. Gr.}$$

* *These numbers are closely approximate.*

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